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 T I L G Q L C C R Y Y T Q W S G S L E V T F M F A G S F M A T T G K M L  
 T I L G Q L C C R Y Y T Q W S G S L E V T F M F A G S F M A T T G K M L  
 D C L K N M G L F G Q N M Y H A M G R S G Y T I H T Q C N A T K F H S G C L L L  
 D C L K N M G L F G Q N M Y H A M G R S G Y T I H T Q C N A T K F H S G C L L L  
 T Y L S K V T R W F S N Y R G S L N I T F M F C C C G S K M A T T G K L L L  
 T Y L S K V T R W F S N Y R G S L N I T F M F C C C G S K M A T T G K L L L  
 T M V G Q I C C R Y Y T Q W S G S L K V T F M F T G S F M A T T G K M L  
 T M V G Q I C C R Y Y T Q W S G S L K V T F M F T G S F M A T T G K M L  
 T L L G E I L N Y Y A N W S G S I R V T F M C V C V C D S F G T G K S L L  
 T L L G E I L N Y Y A N W S G S I R V T F M C V C V C D S F G T G K S L L  
 N T L F S T L L L G E V L N Y Y S N W S G S I K L S F M C V C V C D S F S T G K F L L  
 N T L F S T L L L G E V L N Y Y S N W S G S I K L S F M C V C V C D S F S T G K F L L  
 T Y L G Q L C C R Y Y N N W S G S L E I T F M F C C C G S F M A T T G K V L L  
 T Y L G Q L C C R Y Y N N W S G S L E I T F M F C C C G S F M A T T G K V L L  
 G I I T S Y Y T Q W S G S L E F T F M F T G S F M T T G K L L L  
 G I I T S Y Y T Q W S G S L E F T F M F T G S F M T T G K L L L  
 D A L A D M G L F G Q N M L Y H Y L G R S G Y T I H V Q C N A S K F H Q G C L L L  
 D A L A D M G L F G Q N M L Y H Y L G R S G Y T I H V Q C N A S K F H Q G C L L L  
 D A L K D M G I F G E N M F Y H F L G R S G Y T I H V Q C N A S K F H Q G T L I

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| UniRef90_Q8B552     | V | A | Y | T | P | P | G | G | S | S   | P | A | T | R | E | E | A | M | L   | G | T | H | H | V | I | W | D   | I | L | Q | S | T | C | K | F | V | I | P | Y |   |   |
| UniRef90_Q8B552     | V | A | Y | T | P | P | G | G | S | S   | P | A | T | R | E | E | A | M | L   | G | T | H | H | V | I | W | D   | I | L | Q | S | T | C | K | F | V | I | P | Y |   |   |
| UniRef90_Q6JKS0     | V | A | A | V | P | P | E | M | V | M   | D | M | G | V | P | L | S | Q | A   | L | V | F | P | H | Q | W | I   | N | L | R | T | N | N | C | A | T | I | I | V | Y |   |
| UniRef90_A5GZF5     | I | A | Y | T | P | P | G | V | P | K   | P | T | S | R | K | E | A | M | L   | G | T | H | L | V | W | D | V   | L | Q | S | T | A | S | M | V | I | P | W |   |   |   |
| UniRef90_A5GZF5     | I | A | Y | T | P | P | G | V | P | K   | P | T | S | R | K | E | A | M | L   | G | T | H | L | V | W | D | V   | L | Q | S | T | A | S | M | V | I | P | W |   |   |   |
| UniRef90_A7YF31     | L | A | Y | S | P | P | G | A | S | V   | P | T | T | R | K | D | A | M | L   | G | T | H | I | I | W | D | L   | L | Q | S | S | C | C | V | L | C | V | P | W |   |   |
| UniRef90_A7YF31     | L | A | Y | S | P | P | G | A | S | V   | P | T | T | R | K | D | A | M | L   | G | T | H | I | I | W | D | L   | L | Q | S | S | C | C | V | L | C | V | P | W |   |   |
| UniRef90_K4HM53     | I | A | Y | T | P | P | G | A | P | Q   | P | A | N | R | R | T | A | M | L   | G | T | H | H | V | I | W | D   | F | L | Q | S | S | V | T | L | V | I | P | W |   |   |
| UniRef90_K4HM53     | I | A | Y | T | P | P | G | A | P | Q   | P | A | N | R | R | T | A | M | L   | G | T | H | H | V | I | W | D   | F | L | Q | S | S | V | T | L | V | I | P | W |   |   |
| UniRef90_Q66575     | L | A | Y | S | P | P | G | A | D | P   | P | K | S | R | K | E | A | M | L   | G | T | H | H | V | I | W | D   | I | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_Q66575     | L | A | Y | S | P | P | G | A | D | P   | P | K | S | R | K | E | A | M | L   | G | T | H | H | V | I | W | D   | I | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_Q2LKZ0     | I | A | Y | T | P | P | G | A | D | D   | Q | P | T | A | R | R | Q | A | M   | L | G | T | H | H | V | W | D   | F | L | Q | S | S | I | T | L | V | V | P | W |   |   |
| UniRef90_Q2LKZ0     | I | A | Y | T | P | P | G | A | D | D   | Q | P | T | A | R | R | Q | A | M   | L | G | T | H | H | V | W | D   | F | L | Q | S | S | I | T | L | V | V | P | W |   |   |
| UniRef90_A4UHT9     | I | A | Y | T | P | P | G | A | D | I   | P | E | S | R | R | R | D | A | M   | L | G | T | H | H | V | W | D   | L | L | Q | S | S | C | C | H | I | L | V | V | P | W |
| UniRef90_A4UHT9     | I | A | Y | T | P | P | G | A | D | I   | P | E | S | R | R | R | D | A | M   | L | G | T | H | H | V | W | D   | L | L | Q | S | S | C | C | H | I | L | V | V | P | W |
| UniRef90_B9V435     | L | A | Y | T | P | P | G | I | A | K   | P | I | S | R | R | D | A | M | L   | G | T | H | H | V | W | D | V   | L | Q | S | T | I | S | M | V | V | P | W |   |   |   |
| UniRef90_B9V435     | L | A | Y | T | P | P | G | I | A | K   | P | I | S | R | R | D | A | M | L   | G | T | H | H | V | W | D | V   | L | Q | S | T | I | S | M | V | V | P | W |   |   |   |
| UniRef90_B0YIF3     | I | A | Y | S | P | P | G | A | S | A   | P | A | T | R | K | D | A | M | L   | G | T | H | H | I | I | W | D   | L | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_B0YIF3     | I | A | Y | S | P | P | G | A | S | A   | P | A | T | R | K | D | A | M | L   | G | T | H | H | I | I | W | D   | L | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_Q8V613     | L | A | Y | S | P | P | G | A | G | A   | P | T | N | R | K | Q | A | M | L   | G | T | H | H | V | I | W | D   | L | L | Q | S | S | C | C | C | V | L | C | V | P | W |
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| UniRef90_Q8JJT0     | I | A | Y | T | P | P | G | G | S | S   | P | T | T | R | T | D | A | M | L   | A | T | T | H | H | V | I | W   | D | I | L | Q | S | S | C | C | K | L | V | V | P | Y |
| UniRef90_Q8JJT0     | I | A | Y | T | P | P | G | G | S | S   | P | T | T | R | T | D | A | M | L   | A | T | T | H | H | V | I | W   | D | I | L | Q | S | S | C | C | K | L | V | V | P | Y |
| UniRef90_G0YPH9     | V | A | Y | T | P | P | G | G | S | A   | Q | P | A | S | R | E | L | A | M   | L | G | T | H | H | V | I | W   | D | F | L | Q | S | S | V | T | L | V | V | P | W |   |
| UniRef90_G0YPH9     | V | A | Y | T | P | P | G | G | S | A   | Q | P | A | S | R | E | L | A | M   | L | G | T | H | H | V | I | W   | D | F | L | Q | S | S | V | T | L | V | V | P | W |   |
| UniRef90_Q2YEN8     | L | A | Y | S | P | P | G | A | D | V   | P | A | S | R | K | Q | A | M | L   | G | T | H | H | I | I | W | D   | I | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_Q2YEN8     | L | A | Y | S | P | P | G | A | D | V   | P | A | S | R | K | Q | A | M | L   | G | T | H | H | I | I | W | D   | I | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_H9C6N6     | V | V | V | I | P | E | H | Q | S | M   | N | G | T | L | V | G | N | L | L   | I | F | P | H | Q | F | I | N   | L | R | T | N | N | T | A | T | I | I | V | P | Y |   |
| UniRef90_H9C6N6     | V | V | V | I | P | E | H | Q | S | M   | N | G | T | L | V | G | N | L | L   | I | F | P | H | Q | F | I | N   | L | R | T | N | N | T | A | T | I | I | V | P | Y |   |
| UniRef90_G0Y2E0     | L | A | F | T | P | P | G | G | S | A   | P | A | T | R | R | D | A | M | L   | G | T | H | H | E | I | W | D   | L | L | Q | S | S | I | T | L | V | V | P | W |   |   |
| UniRef90_G0Y2E0     | L | A | F | T | P | P | G | G | S | A   | P | A | T | R | R | D | A | M | L   | G | T | H | H | E | I | W | D   | L | L | Q | S | S | I | T | L | V | V | P | W |   |   |
| UniRef90_H6VLP2     | L | A | Y | T | P | P | G | G | N | A   | P | T | T | R | K | E | A | M | L   | A | T | H | H | I | I | W | D   | V | L | Q | S | S | V | D | F | V | V | P | W |   |   |
| UniRef90_H6VLP2     | L | A | Y | T | P | P | G | G | N | A   | P | T | T | R | K | E | A | M | L   | A | T | H | H | I | I | W | D   | V | L | Q | S | S | V | D | F | V | V | P | W |   |   |
| UniRef90_K4NTR6     | I | A | Y | T | P | P | G | G | N | A   | Q | P | T | S | R | E | I | A | M   | L | G | T | H | H | V | I | W   | D | F | L | Q | S | S | V | T | M | I | I | P | W |   |
| UniRef90_K4NTR6     | I | A | Y | T | P | P | G | G | N | A   | Q | P | T | S | R | E | I | A | M   | L | G | T | H | H | V | I | W   | D | F | L | Q | S | S | V | T | M | I | I | P | W |   |
| UniRef90_H9BP13     | I | A | Y | T | P | P | G | G | S | L   | P | A | N | R | M | Q | A | M | L   | G | T | H | H | V | I | W | D   | F | L | Q | S | S | V | T | L | V | V | P | W |   |   |
| UniRef90_H9BP13     | I | A | Y | T | P | P | G | G | S | L   | P | A | N | R | M | Q | A | M | L   | G | T | H | H | V | I | W | D   | F | L | Q | S | S | V | T | L | V | V | P | W |   |   |
| UniRef90_B5BSU7     | I | A | Y | S | P | P | G | A | N | V   | P | E | N | R | K | D | A | M | L   | G | T | H | H | M | V | W | D   | V | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_B5BSU7     | I | A | Y | S | P | P | G | A | N | V   | P | E | N | R | K | D | A | M | L   | G | T | H | H | M | V | W | D   | V | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_P07210     | V | A | A | I | P | P | E | H | Q | N   | F | D | G | T | L | L | G | N | L   | I | Y | P | H | Q | Y | I | N   | L | R | T | N | N | S | A | T | I | I | L | P | Y |   |
| UniRef90_P07210     | V | A | A | I | P | P | E | H | Q | N   | F | D | G | T | L | L | G | N | L   | I | Y | P | H | Q | Y | I | N   | L | R | T | N | N | S | A | T | I | I | L | P | Y |   |
| UniRef90_A0A023VYX2 | I | A | Y | S | P | P | G | G | I | Q   | P | A | T | R | R | D | A | M | L   | G | T | H | H | V | I | W | D   | F | L | Q | S | S | V | N | L | V | I | P | W |   |   |
| UniRef90_A0A023VYX2 | I | A | Y | S | P | P | G | G | I | Q   | P | A | T | R | R | D | A | M | L   | G | T | H | H | V | I | W | D   | F | L | Q | S | S | V | N | L | V | I | P | W |   |   |
| UniRef90_G8IJE5     | I | A | Y | T | P | P | G | G | I | R   | V | P | R | N | R | K | E | A | M   | L | G | T | H | H | L | I | W   | D | V | L | Q | S | T | V | S | M | V | V | P | W |   |
| UniRef90_G8IJE5     | I | A | Y | T | P | P | G | G | I | R   | V | P | R | N | R | K | E | A | M   | L | G | T | H | H | L | I | W   | D | V | L | Q | S | T | V | S | M | V | V | P | W |   |
| UniRef90_B9V457     | I | A | Y | T | P | P | G | V | D | K   | P | N | T | R | T | K | A | M | L   | G | T | H | H | V | W | D | V   | L | Q | S | S | V | T | V | S | M | V | V | P | W |   |
| UniRef90_B9V457     | I | A | Y | T | P | P | G | V | D | K   | P | N | T | R | T | K | A | M | L   | G | T | H | H | V | W | D | V   | L | Q | S | S | V | T | V | S | M | V | V | P | W |   |
| UniRef90_T1WQK9     | I | S | Y | S | P | P | G | A | S | V   | P | T | S | R | K | D | A | M | L   | G | T | H | H | I | I | W | D   | T | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_T1WQK9     | I | S | Y | S | P | P | G | A | S | V   | P | T | S | R | K | D | A | M | L   | G | T | H | H | I | I | W | D   | T | L | Q | S | S | C | C | V | L | C | V | P | W |   |
| UniRef90_I3UJT1     | I | A | Y | T | P | P | G | A | G | I   | P | E | T | R | K | D | A | M | L   | G | T | H | H | V | W | D | L   | L | Q | S | S | C | C | H | I | L | V | P | W |   |   |
| UniRef90_I3UJT1     | I |   |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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|   | 170 | 180 | 190 | 200 |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-----|-----|-----|-----|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| V | G   | V   | N   | R   | Y | D | Q   | Y | K | V | H | K | P | W | T | L | V | V | M | V | V | A | P | L | T | V | N | T | E | G | A | P | Q | L | K | V | Y | A | N |   |   |   |
| I | S   | T   | S   | V   | Y | N | T   | T | L | S | Y | D | G | W | I | T | M | W | Y | Q | T | A | I | V | V | P | P | N | C | P | S | T | A | C | Q | I | V | I | A | N |   |   |
| I | N   | A   | V   | P   | F | N | D   | S | A | L | S | N | N | F | T | L | V | V | T | P | I | S | P | L | K | Y | C | P | T | G | A | T | T | A | P | L | I | T | V | T |   |   |
| V | S   | A   | S   | H   | Y | R | F   | F | T | P | D | I | Y | T | L | V | Y | T | C | W | T | N | L | V | V | A | P | N | T | A | T | A | R | M | I | C | F | F |   |   |   |   |
| V | S   | A   | S   | H   | Y | R | F   | F | T | P | D | I | Y | T | L | V | Y | T | C | W | T | N | L | V | V | A | P | N | T | A | T | A | R | M | I | C | F | F |   |   |   |   |
| I | S   | S   | Q   | S   | H | Y | R   | K | D | A | Y | T | T | A | G | Y | V | T | C | W | Y | Q | T | N | L | V | V | P | S | S | G | T | P | T | E | C | V | V | L | G | F |   |
| I | S   | S   | Q   | S   | H | Y | R   | A | M | G | S | N | D | Y | F | D | Y | Y | I | W | Y | Q | T | N | F | V | V | P | S | S | G | A | P | T | T | S |   |   |   |   |   |   |
| I | S   | S   | Q   | T   | H | Y | R   | L | V | Q | Q | D | E | Y | T | S | V | T | C | W | Y | Q | T | S | L | V | V | P | P | G | A | P | A | T | C | G | V | L | L | C | L |   |
| I | S   | S   | Q   | T   | H | Y | R   | L | V | Q | Q | D | E | Y | T | S | V | T | C | W | Y | Q | T | S | L | V | V | P | P | G | A | P | A | T | C | G | V | L | L | C | L |   |
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| I | S   | S   | H   | F   | F | R | R   | T | R | K | D | N | Y | T | S | G | F | V | T | L | W | H | Q | T | A | V | S | N | G | T | S | G | S | I | L | M | V | T | C | S | S |   |
| V | S   | A   | S   | H   | F | R | N   | T | T | P | D | K | A | G | F | I | T | C | W | Y | Q | T | N | L | V | V | P | A | D | T | P | T | T | A | N | L | L | C | O | F |   |   |
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| I | S   | S   | Q   | T   | H | Y | R   | L | V | Q | Q | D | S | A | G | N | V | T | C | W | Y | Q | T | G | I | V | V | P | P | G | T | P | N | K | C | V | V | L | C | F |   |   |
| I | N   | S   | V   | P   | M | D | S   | M | T | R | H | N | N | V | S | L | L | V | T | P | V | V | P | L | T | N | P | T | G | M | S | T | T | I | P | I | T | V | T |   |   |   |
| I | S   | S   | Q   | T   | A | Y | R   | F | N | Q | D | G | N | V | L | T | I | S | V | F | Y | Q | T | A | V | V | V | P | V | G | A | P | S | T | T | C | Q | I | A | V | L |   |
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| I | S   | S   | N   | T   | H | Y | S   | F | F | D | Y | A | T | G | L | V | S | L | W | Y | Q | T | K | F | V | V | P | I | G | A | P | T | T | T | A | Y | I | V | V | F |   |   |
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| V | N   | A   | V   | P   | M | D | S   | M | L | R | H | N | N | W | S | L | V | I | I | P | I | C | P | L | Q | V | Q | P | P | G | T | Q | S | I | P | I | T | V | S |   |   |   |
| I | N   | S   | S   | H   | Y | T | Y   | N | D | Y | A | A | G | I | V | T | M | W | Y | Q | T | N | Y | V | V | P | A | G | A | P | N |   |   |   |   |   |   |   |   |   |   |   |
| I | N   | S   | S   | H   | Y | T | Y   | N | D | Y | A | A | G | I | V | T | M | W | Y | Q | T | N | Y | V | V | P | A | G | A | P | N |   |   |   |   |   |   |   |   |   |   |   |
| V | S   | A   | S   | H   | Y | R | N   | T | T | P | D | T | A | G | F | I | T | C | W | Y | Q | T | K | L | V | V | P | P | N | T | A | S | T | A | D | M | L | C | F | F |   |   |
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| I | S   | A   | S   | H   | Y | R | F   | T | T | P | D | T | A | G | F | I | T | C | W | Y | Q | T | N | F | V | T | P | P | S | T | P | K | Y | A | D | I | I | L | C | F | F |   |
| I | S   | A   | S   | H   | Y | R | F   | T | T | P | D | T | A | G | F | I | T | C | W | Y | Q | T | N | F | V | T | P | P | S | T | P | K | Y | A | D | I | I | L | C | F | F |   |
| I | S   | S   | S   | H   | Y | R | M   | V | Q | Q | D | P | Y | T | I | T | C | W | Y | Q | T | N | I | V | V | P | P | G | A | P | T | S | C | D | V | L | L | C | F | F |   |   |
| I | S   | S   | S   | H   | Y | R | M   | V | Q | Q | D | P | Y | T | I | T | C | W | Y | Q | T | N | I | V | V | P | P | G | A | P | T | S | C | D | V | L | L | C | F | F |   |   |
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| I | S   | S   | Q   | T   | H | Y | R   | F | V | Q | H | D | D | A | G | Y | I | T | C | W | Y | Q | T | S | L | V | V | P | A | E | T | P | Q | Q | C | T | I | L | L | C | F | F |
| I | S   | S   | Q   | T   | H | Y | R   | F | V | Q | H | D | D | A | G | Y | I | T | C | W | Y | Q | T | S | L | V | V | P | A | E | T | P | Q | Q | C | T | I | L | L | C | F | F |
| I | M   | N   | A   | V   | P | M | D   | N | M | L | R | H | N | N | V | S | L | L | I | T | P | I | V | P | L | K | A | N | T | D | A | V | N | S | L | P | I | T | V | T |   |   |
| I | M   | N   | A   | V   | P | M | D   | N | M | L | R | H | N | N | V | S | L | L | I | T | P | I | V | P | L | K | A | N | T | D | A | V | N | S | L | P | I | T | V | T |   |   |
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QUERY

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F S D R L K Q I T L G D S T I T T Q D T L N S V V A Y G E W P Q Y

S D R V R S I T L G N S T I T T Q E C A N V V V G Y G V W P E Y

S D R V R Q I T L G N S T I T T Q E A A N A V V G Y G E W P S Y  
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 F S D R L K Q I T M G N S T I T T Q D A L H T V L A Y G E W P Q Y

F S D R L K Q I T L G N S T I T T Q D A L H T I L A Y G E W P Q Y  
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S D R I I Q I T R G D T T I T S Q D I A N A V V A Y G V W P T Y

F S D R I M Q I T S G N S T I T T Q E A V N A V V A Y G C W P S F

S D R V L Q L T L G N S T I T T Q E A A N S V V A Y G R W P E F  
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T T A T T S S V N M Y T V V L D K K T S L A E E V F A I K V D  
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 Q I D T L I P I N S V T G N T N N T S I Y T V T L T R E T S L A Q E I F V D I A  
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L G P E D A N P V D A P T M S S N R F Y T L E S V E W E E G S R G W W W K L P D

E E T P S H H I P G K V V T Q T K M Y F T L N V N I T E D K P I R A W D M D L A  
 E E T P S H H I P G K V V T Q T K M Y F T L N V N I T E D K P I R A W D M D L A  
 N T M E M Y R I P L S T T G S T D P I F C L S  
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L T A Q D A T A I D K P S Q P D T S S N R F Y T S K L W T N E S K G W W W K L P  
 I K D S E A N P V D Q P T V A A C R F Y T L D T V T W R K E S R G W W W K L P  
 L K D D D A S D V N K P T T S A C R F Y T L A S K T W S R E S K G W C W K L P

MD  
 MD

N T M E M Y Q I P L N D N L S K A P I F C L S  
 N T M E M Y Q I P L N D N L S K A P I F C L S  
 L S D L D A S S I D K P T T S A D R F Y T L D S V N W T S T S L G W W W K L P

E A Y P I P L T H G Q Q N N R Q A I F A L S L S P A S  
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I T Q G A Q T A R I A A I D V S M V  
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I S P Q E A N P V D A P T V S S N R F Y T L E S V Q W S K T S K G W W W K L P  
 L P A S T X X X X X X X X X X X X X Y T L D S K M W Q K N S K G W C W K L P  
 L S D L D A T S V D K P T T S S D R F Y T L S S V S W T N T S K G W W W K L P  
 S H D A N T A I F G F Q L D P G S  
 S H D A N T A I F G F Q L D P G S

L S D V D A T S V D K P T T S A D R F Y T L A S V D W K V S S K G W W W K L P  
 L S S K D A S A I D K P S Q P D T S S N R F Y T L R S V T W S S S S K G W W L P

L N S K D A T A I D K P T T S T N R F Y T L E S R E W R S D S K G W W W K L P

D S G A G I D K L T D P G P S V D R F Y T L D S I E W S T T T Q G Y Y Y N L P

I T I D V G K A D E N P I I N W N L D L N  
 I T I D V G K A D E N P I I N W N L D L N

I R D D E A N P V D Q P T V A T C R F Y T L D T V M W G K E S K G W W W K L P  
 F D G A G E A S D M S P G Q H V I D F T P L K S I E W T K T A E N W F I P F P

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I A Y T P P G G G R V P Q N R E E A M L G G T N N V I W D F F G G L L Q Q S S V T L N I P W  
V A A I P E F M M A S N V M A G N I T Y P H H V V W D L L R R T L N N S S A T L V L P Y  
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I L T Y S P P G G A S P P K T T R K D A M L G G T H H V I W D L L G G Q Q S S C C T M V A P W  
I A Y T P P G G T Q P T S R A V A M L G G T H H V I W D F F G G L L Q Q S S I T L V I P W  
I A Y T P P G G S Q P A T R E D A M L G G T Y V V W D F F G G L L Q Q S S V T L A I P W  
I G Y S P P G G S P A T R E R D A M L G G T Y V V W D F F G G L L Q Q S S V T L A I P W  
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170 180 190 200  
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I S N V M F R N L Q S F Y A G I V T M W Y Q T N F V V P D G A P T T S A D I  
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M S A G F F H T M K D K Y S S G G Y I T L W R Q T D F V P G S S N G V  
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I S N T V Y R R C A R D D  
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V R A Y P D S P W A A M Y N T H S M W N C G W R V Q V T V N G N Q K F H H A G G A L L C  
D K L K K M G S F H E V V K A H H L V K N G W D V V V Q V N A S S F A H H A G G A L L C  
A S P E L N P Y L R H L S R Y F G A V R C G F H F Q V V Q L N V N I G S G V F G G G C L A  
P N T G V Y P L P A A L C N A H A Y F N C G F D V T V V V N A S S Q F H H G G S L I  
E D I P N L N L M A A N F N Y W R G S I V I K L T V F A S T F F N K G R L R  
D A L S E M G L F G Q N M Q Y H Y L G R S G Y T I H V Q C N A S S K F H H Q G G C L L  
L A P S I N P Y L D H D S K L Y S T W S G G I D V R F T V S G N S G V F F G G G K L L A  
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D V L T E T G V F G Q N A K M Y H Y L Y R S G F C I H V Q C N A S S K F H H Q G G A L L  
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L G P Q C N P Y T R H V A K M Y G G W S G M E I R L T V S S G S G I Y A G K I M  
L G P Q C N P Y T R H V A K M Y G G W S G M E I R L T V S S G S G I Y A G K I M  
Q I T G V P L A A L N M F H Y W R A D L H I K F H V I K T S Y H T G R L R  
Q I T G V P L A A L N M F H Y W R A D L H I K F H V I K T S Y H T G R L R  
L G P R L N P Y T A H L S A M Y A G W G G S F Q I R V T I S G S G I Y A G R A V  
L G P R L N P Y T A H L S A M Y A G W G G S F Q I R V T I S G S G I Y A G R A V  
Q H S P Q N N P F T Q L S Q M Y A G W A G G M Q F R F V A G S G I F G G R L V  
Q H S P Q N N P F T Q L S Q M Y A G W A G G M Q F R F V A G S G I F G G R L V  
A R L T G V P Y I Q S L A R Y F A Q W R G S L T Y T F E Y T G P A V S S G R L L  
A R L T G V P Y I Q S L A R Y F A Q W R G S L T Y T F E Y T G P A V S S G R L L  
L D P T L N P F L N V L F E R F V Y W K G D V E L T V Q I N G N P F Q Q G L L Y  
L D P T L N P F L N V L F E R F V Y W K G D V E L T V Q I N G N P F Q Q G L L Y  
L S D Q F Q N M F T K G M R T H A F T K T G Y R V L T V Q I N T S P F H T G L I G  
L S D Q F Q N M F T K G M R T H A F T K T G Y R V L T V Q I N T S P F H T G L I G  
I Q L A Q I P N L K W L S E C Y F Q Y F R G S L V I S M S V Y S S M F N R G R L R  
I Q L A Q I P N L K W L S E C Y F Q Y F R G S L V I S M S V Y S S M F N R G R L R  
L G P S L N P Y T L H L S A M W A G W G G S F E V I K V V I S G S G L Y A G K L L  
L G P S L N P Y T L H L S A M W A G W G G S F E V I K V V I S G S G L Y A G K L L  
D M L K D M G L F G Q N M H Y H Y L G R S G Y T I H V Q C N A S K F H Q G C V L  
D M L K D M G L F G Q N M H Y H Y L G R S G Y T I H V Q C N A S K F H Q G C V L  
L I F R N I P T F S L F F D K F Q Y W R G S L E V K F M T F G S Q F N T G R Y Q  
L I F R N I P T F S L F F D K F Q Y W R G S L E V K F M T F G S Q F N T G R Y Q  
L I F R N I P T F S L F F K V H A Y W R G D M E V R V Q I N S N K F Q V G Q L Q  
L I F R N I P T F S L F F K V H A Y W R G D M E V R V Q I N S N K F Q V G Q L Q  
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UniRef90\_T1UMW8  
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UniRef90\_O36967

A Y F N P L R N A T Y Q T A I E N T L S G E H V I L Q A C N S D S V T F T I P Y  
V A L L P P G L D P T R V R D P G V L P H G Q V L D A R A N V D P L T F N I N G  
L T A A Y D S I D P Q S S D S T S Y F N K V F D F T E L D E G E M V I P Y  
L T A A Y D S I D P Q S S D S T S Y F N K V F D F T E L D E G E M V I P Y  
L A Y I P G I G E G E V V T I D Q A R A S P H I V I S L D N A M T Y T W K V P Y  
L A Y I P G I G E G E V V T I D Q A R A S P H I V I S L D N A M T Y T W K V P Y  
V S S K Y D S Y Q A D D V T Q S G S A L Q R N H V I L D L D N A N N E A Y T W K V P Y  
I A Y G A D H S R A P T L T Y D D S T C Y F N E T L D F S D N D T L E F D V P Y  
I A Y G A D H S R A P T L T Y D D S T C Y F N E T L D F S D N D T L E F D V P Y  
L A F Q P N D Y I L L Q G D T L T V L T H G P H E I W D I S N S S S V T F S C P Y  
L A F Q P N D Y I L L Q G D T L T V L T H G P H E I W D I S N S S S V T F S C P Y  
A A Y I P G V E E G A T V T L E E Q A R A S P N I V M S L D N A M S Y T W R V P Y  
A A Y I P G V E E G A T V T L E E Q A R A S P N I V M S L D N A M S Y T W R V P Y  
I C Y V P L Y L Q D I T L D Q A Y S Y P Y Q M F D L R E G N S S F T F N I P Y  
I C Y V P L Y L Q D I T L D Q A Y S Y P Y Q M F D L R E G N S S F T F N I P Y  
I G I F P G I N P G N Q D P T A F P H F Y V D A R E S S P V T F P V P D  
C A Y I P N V P A G K T P T L K D I R A A H N W I I S V E G P K S V E L E I P Y  
C A Y I P N V P A G K T P T L K D I R A A H N W I I S V E G P K S V E L E I P Y  
V C Y C P R V L S D I T I N Q A R G S P H V V I D M K D P Q S S Y T I T L P F  
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I A Y I P G I K S N V T L D Q A R S S N Y V V C S L R Q E Q Q S Y T V R I P Y  
V V C V P E A E M G S P N V G V G N L T I F P H Q M I N L R T N  
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I L Y V P G F F G G T L P T N F E T D A N Y S T V V D L R S D T D V E F N V P Y  
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I A A I P E H Q N C D G T L L G N I T I Y P H Q F I N L R S N S A T L I L P Y  
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L C F E M A G D D R Y D H Q A S M A V N F T V I D F S N S N T G S L V V P Y  
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A Y F M P L A S Y E S E L V A N V I T L P H V Q L D I S K E A T E V L L K I P Y  
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V S A V P V Q F R L S K L T R V S Q M A F P S M V C D A R A V D P I T F N  
V A L L P P G L N D P T R V R D P G V L P H A Q V D A R A V D P I T F N  
V A L L P P G L N D P T R V R D P G V L P H A Q V D A R A V D P I T F N  
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A S F T P V L K N V V L K E A L Q S Y N T T L D V G N V T E Y I F K V P Y  
A S F T P V L K N V V L K E A L Q S Y N T T L D V G N V T E Y I F K V P Y  
L T M V P G T I G S T Q Q D R Y S L S T L P S T I I D A T S T S V E I A L P W  
L T M V P G T I G S T Q Q D R Y S L S T L P S T I I D A T S T S V E I A L P W  
C C H I P P N V G D S T G L T A E Q L S V Y P N V Q I D A T S T S V E I A L P W  
C C H I P P N V G D S T G L T A E Q L S V Y P N V Q I D A T S T S V E I A L P W  
I S F I P F Y Y N T T S A G V P D V S R T Q K V I V D L R T E A G S Y A H C P Y  
I S F I P F Y Y N T T S A G V P D V S R T Q K V I V D L R T E A G S Y A H C P Y

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170 180 190 200  
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V R A V D Y H W T D Q G G T S T L G F W V L Q P L I N P F D A L S T A W V S V E  
M A P T E F R R T M D N E V A S L S L F V V V N P L K L L T T A S N T V D I L V Y  
M A P T E F R R T M D N E V A S L S L F V V V N P L K L L T T A S N T V D I L V Y  
V A D R P W V S N N V A S P S K I F A F V L N E L V M A E T V P D S V E I L V Y  
V A D R P W V S N N V A S P S K I F A F V L N E L V M A E T V P D S V E I L V Y  
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I Y A D P R G F T V A D N S G Y V S I Y V E N E L K V M E T A S S T I D I V V E  
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I T D T P Q A A G E F V A P S Y I C M F I L N P L V A M E S V P S I V T  
N S E T W M R S T D D V L G R L Q I F V N N Q L A A N R T A A N H V Y V V V T  
N S E T W M R S T D D V L G R L Q I F V N N Q L A A N R T A A N H V Y V V V T

T N T T W R K S T D E S Y G Y L E W H V V N R L T V N A T A P N T I P C V I L  
T N T T W R K S T D E S Y G Y L E W H V V N R L T V N A T A P N T I P C V I L

V A T V P W A F S Q I H A C R S I V V E V L N E L V N T S T V S D T I E V L V E  
V A T V P W A F S Q I H A C R S I V V E V L N E L V N T S T V S D T I E V L V E

L R P N M Y

T N T T W R K S T R E N H G Y I T W H V V N R L T V N S T S P S T I N C V I L  
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I T N R Y A S D S L V D P P G K V Y V F V I N K L I P M E A V S N D V F L N I Y

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V G Q D P Y T S T A N R N V D Y L I F L L I T P L G I P T G T A P T L Q V V V E  
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I N E R P Y N D P L L A P I G E V N I F I L N Q L R A V T G T S D K V Y I N L Y  
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V S V Q P W K L T S A D S V G R L Y V L V L N E L R A T N T V S D T I S A L V E  
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L R S V M N T I A R D S L G T V Y F V P I S L K G I T V D E V T V T V Y  
V S P V Q Y D L V T K F T P W A F L A H V Y A P L N T P S A A S L Q V N V  
F F P R G A G V T G I E D S W C V V I T T V V E P R L G L M A G E L N V N L A  
I F H R A F V R T N S E R C V S L D V Q I L S P L T G A G G S S D I N L R V F  
V S S T H Y D L T S G G D W G L F L W V Y S P L T S S A S S Q T I N I S I R  
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I S D K P Y Q N G Q V D G I G R L F I L V L N E L I P M D N V A K E L Q I L V Y  
I S D K P Y Q N G Q V D G I G R L F I L V L N E L I P M D N V A K E L Q I L V Y  
I S I G K M S L V C K D Y L F R L H V M I L D P L V K T G N A S N

V Q S R P W L P T V L G Y N G Y L Q F R V L N S L A S S S E T I S A V Q L N V W  
I S P Y S A Y N L G R Y R W G R V V V A V Y S P L N  
R Y H R A F V R N Q T H K T A T I Y V Q V L S P L Q T G E G G A N D M F  
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E R Q V I F H Y N N A S D P G T F L M Y V L S P L V N S D G S P C Q I N I L V Y  
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