|  |  |  |  |
| --- | --- | --- | --- |
| **Instance** | **Minmax Algorithm**  **Branch count** | **Alpha-pruning**  **Algorithm**  **Branch count** | **Alpha-pruning**  **Algorithm**  **Pruning count** |
| **(human first)** | **56616** | **6857** | **5760** |
| -------------  | | | |  -------------  | | O | |  -------------  | | | |  ------------- | -------------  | X | | |  -------------  | | O | |  -------------  | | | |  ------------- | -------------  | X | O | |  -------------  | | O | |  -------------  | | | |  ------------- |  |
| -------------  | X | O | |  -------------  | | O | |  -------------  | | X | |  ------------- | -------------  | X | O | |  -------------  | O | O | |  -------------  | | X | |  ------------- | -------------  | X | O | |  -------------  | O | O | X |  -------------  | | X | |  ------------- |  |
| -------------  | X | O | |  -------------  | O | O | X |  -------------  | O | X | |  ------------- | -------------  | X | O | X |  -------------  | O | O | X |  -------------  | O | X | |  ------------- | -------------  | X | O | X |  -------------  | O | O | X |  -------------  | O | X | O |  ------------- |  |
| **(PC first)** | **557714** | **20364** | **18861** |
| -------------  | X | | |  -------------  | | | |  -------------  | | | |  ------------- | -------------  | X | | |  -------------  | | | |  -------------  | O | | |  ------------- | -------------  | X | X | |  -------------  | | | |  -------------  | O | | |  ------------- |  |
| -------------  | X | X | O |  -------------  | | | |  -------------  | O | | |  ------------- | -------------  | X | X | O |  -------------  | | X | |  -------------  | O | | |  ------------- | -------------  | X | X | O |  -------------  | | X | |  -------------  | O | O | |  ------------- |  |
| -------------  | X | X | O |  -------------  | | X | |  -------------  | O | O | X |  ------------- |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Count** | **Alpha-Beta pruned count when pc first** | **Alpha-Beta pruned count when human first** |
| 1 | 19315 | 5719 |
| 2 | 19094 | 5657 |
| 3 | 19318 | 6460 |
| 4 | 19095 | 6585 |
| 5 | 19094 | 6387 |
| Average | 19183.2 | 6161.6 |