Output 1:

C:\Users\Sanyukta\Anaconda3\python.exe C:/Users/Sanyukta/PycharmProjects/AI\_HW2\_version2/ttt.py

Player, Enter your move:

0

0

Opponent Plays

Number of Nodes generated in MIN MAX: 8232

Number of Nodes generated in ALPHA BETA PRUNING: 749

Number of Nodes generated in MIN MAX: 7584

Number of Nodes generated in ALPHA BETA PRUNING: 641

Number of Nodes generated in MIN MAX: 8232

Number of Nodes generated in ALPHA BETA PRUNING: 336

Number of Nodes generated in MIN MAX: 7332

Number of Nodes generated in ALPHA BETA PRUNING: 844

Number of Nodes generated in MIN MAX: 6380

Number of Nodes generated in ALPHA BETA PRUNING: 365

Number of Nodes generated in MIN MAX: 7584

Number of Nodes generated in ALPHA BETA PRUNING: 335

Number of Nodes generated in MIN MAX: 6380

Number of Nodes generated in ALPHA BETA PRUNING: 381

Number of Nodes generated in MIN MAX: 7980

Number of Nodes generated in ALPHA BETA PRUNING: 438

The optimal coordinates for Min Max is: 1 1

The optimal coordinates for aplha beta pruning is: 1 1

---BOARD---

['X', 'null', 'null']

['null', 'O', 'null']

['null', 'null', 'null']

Player, Enter your move:

0

2

Opponent Plays

Number of Nodes generated in MIN MAX: 206

Number of Nodes generated in ALPHA BETA PRUNING: 101

Number of Nodes generated in MIN MAX: 137

Number of Nodes generated in ALPHA BETA PRUNING: 34

Number of Nodes generated in MIN MAX: 137

Number of Nodes generated in ALPHA BETA PRUNING: 36

Number of Nodes generated in MIN MAX: 174

Number of Nodes generated in ALPHA BETA PRUNING: 40

Number of Nodes generated in MIN MAX: 98

Number of Nodes generated in ALPHA BETA PRUNING: 10

Number of Nodes generated in MIN MAX: 174

Number of Nodes generated in ALPHA BETA PRUNING: 42

The optimal coordinates for Min Max is: 0 1

The optimal coordinates for aplha beta pruning is: 0 1

---BOARD---

['X', 'O', 'X']

['null', 'O', 'null']

['null', 'null', 'null']

Player, Enter your move:

1

0

Opponent Plays

Number of Nodes generated in MIN MAX: 11

Number of Nodes generated in ALPHA BETA PRUNING: 8

Number of Nodes generated in MIN MAX: 14

Number of Nodes generated in ALPHA BETA PRUNING: 13

Number of Nodes generated in MIN MAX: 1

Number of Nodes generated in ALPHA BETA PRUNING: 1

Number of Nodes generated in MIN MAX: 11

Number of Nodes generated in ALPHA BETA PRUNING: 9

The optimal coordinates for Min Max is: 2 1

The optimal coordinates for aplha beta pruning is: 2 1

---BOARD---

['X', 'O', 'X']

['X', 'O', 'null']

['null', 'O', 'null']

Opponent is the Winner!!!

Process finished with exit code 0

Output 2:

C:\Users\Sanyukta\Anaconda3\python.exe C:/Users/Sanyukta/PycharmProjects/AI\_HW2\_version2/ttt.py

Player, Enter your move:

1

1

Opponent Plays

Number of Nodes generated in MIN MAX: 6812

Number of Nodes generated in ALPHA BETA PRUNING: 703

Number of Nodes generated in MIN MAX: 7064

Number of Nodes generated in ALPHA BETA PRUNING: 383

Number of Nodes generated in MIN MAX: 6812

Number of Nodes generated in ALPHA BETA PRUNING: 999

Number of Nodes generated in MIN MAX: 7064

Number of Nodes generated in ALPHA BETA PRUNING: 367

Number of Nodes generated in MIN MAX: 7064

Number of Nodes generated in ALPHA BETA PRUNING: 436

Number of Nodes generated in MIN MAX: 6812

Number of Nodes generated in ALPHA BETA PRUNING: 1128

Number of Nodes generated in MIN MAX: 7064

Number of Nodes generated in ALPHA BETA PRUNING: 562

Number of Nodes generated in MIN MAX: 6812

Number of Nodes generated in ALPHA BETA PRUNING: 1560

The optimal coordinates for Min Max is: 2 2

The optimal coordinates for aplha beta pruning is: 2 2

---BOARD---

['null', 'null', 'null']

['null', 'X', 'null']

['null', 'null', 'O']

Player, Enter your move:

0

2

Opponent Plays

Number of Nodes generated in MIN MAX: 150

Number of Nodes generated in ALPHA BETA PRUNING: 57

Number of Nodes generated in MIN MAX: 182

Number of Nodes generated in ALPHA BETA PRUNING: 83

Number of Nodes generated in MIN MAX: 150

Number of Nodes generated in ALPHA BETA PRUNING: 40

Number of Nodes generated in MIN MAX: 158

Number of Nodes generated in ALPHA BETA PRUNING: 42

Number of Nodes generated in MIN MAX: 186

Number of Nodes generated in ALPHA BETA PRUNING: 126

Number of Nodes generated in MIN MAX: 106

Number of Nodes generated in ALPHA BETA PRUNING: 84

The optimal coordinates for Min Max is: 2 0

The optimal coordinates for aplha beta pruning is: 2 0

---BOARD---

['null', 'null', 'X']

['null', 'X', 'null']

['O', 'null', 'O']

Player, Enter your move:

2

1

Opponent Plays

Number of Nodes generated in MIN MAX: 11

Number of Nodes generated in ALPHA BETA PRUNING: 8

Number of Nodes generated in MIN MAX: 16

Number of Nodes generated in ALPHA BETA PRUNING: 16

Number of Nodes generated in MIN MAX: 11

Number of Nodes generated in ALPHA BETA PRUNING: 9

Number of Nodes generated in MIN MAX: 12

Number of Nodes generated in ALPHA BETA PRUNING: 10

The optimal coordinates for Min Max is: 0 1

The optimal coordinates for aplha beta pruning is: 0 1

---BOARD---

['null', 'O', 'X']

['null', 'X', 'null']

['O', 'X', 'O']

Player, Enter your move:

0

0

Opponent Plays

Number of Nodes generated in MIN MAX: 2

Number of Nodes generated in ALPHA BETA PRUNING: 2

Number of Nodes generated in MIN MAX: 2

Number of Nodes generated in ALPHA BETA PRUNING: 2

The optimal coordinates for Min Max is: 1 2

The optimal coordinates for aplha beta pruning is: 1 2

---BOARD---

['X', 'O', 'X']

['null', 'X', 'O']

['O', 'X', 'O']

Player, Enter your move:

1

0

The match is a DRAW!

Process finished with exit code 0