

## Practical - 4

### Program Definition:

Write a python program to create tic-tac-toe game using the minimax algorithm.

### Output:

```
Welcome to Tic Tac Toe!
Choose your symbol (1 for O, -1 for X): 1
Choose opponent (AI/Friend): ai
  1 2 3
1 | | 
2 | | 
3 | | 
Enter your move (1-9): 1
  1 2 3
1 0 | | 
2 | | 
3 | | 
Computer move:
  1 2 3
1 0 | X | 
2 | | 
3 | | 
Enter your move (1-9): 4
  1 2 3
1 0 | X | 
2 0 | | 
3 | | 
Computer move:
  1 2 3
1 0 | X | X
2 0 | | 
3 | | 
Enter your move (1-9): 7
  1 2 3
1 0 | X | X
2 0 | | 
3 0 | | 
Congratulations! You win!
```

```
Welcome to Tic Tac Toe!
Choose your symbol (1 for O, -1 for X): -1
Choose opponent (AI/Friend): friend
  1 2 3
1 | | 
2 | | 
3 | | 
Enter your move (1-9): 1
  1 2 3
1 X | | 
2 | | 
3 | | 
Enter your move (1-9): 23
Invalid input. Enter a number between 1 and 9.
Enter your move (1-9): 4
  1 2 3
1 X | | 
2 0 | | 
3 | | 
Enter your move (1-9): 5
  1 2 3
1 X | | 
2 0 | X | 
3 | | 
Enter your move (1-9): 4
Position already taken. Try again.
Enter your move (1-9): 7
  1 2 3
1 X | | 
2 0 | X | 
3 0 | | 
Enter your move (1-9): 9
  1 2 3
1 X | | 
2 0 | X | 
3 0 | | X
Sorry, you lose!
```