

MOTION CUT TASK 4

To create a Text-based Adventure Game.

Initialize the game board

```
board = [" " for _ in range(9)]
```

Function to print the game board

```
def print_board():
```

```
    print(" | | ")
```

```
    print(f"{board[0]} | {board[1]} | {board[2]}")
```

```
    print(" | | ")
```

```
    print("-----")
```

```
    print(" | | ")
```

```
    print(f"{board[3]} | {board[4]} | {board[5]}")
```

```
    print(" | | ")
```

```
    print("-----")
```

```
    print(" | | ")
```

```
    print(f"{board[6]} | {board[7]} | {board[8]}")
```

```
    print(" | | ")
```

Function to check for a win

```

def check_win(player):
    # Check rows, columns, and diagonals
    for i in range(3):
        if (board[i] == board[i + 3] == board[i + 6] == player) or \
            (board[i * 3] == board[i * 3 + 1] == board[i * 3 + 2] == player) or \
            (board[0] == board[4] == board[8] == player) or \
            (board[2] == board[4] == board[6] == player):
            return True
    return False

```

```

# Main game loop
current_player = "X"
while True:
    print_board()
    print(f"Player {current_player}'s turn. Enter a position (1-9): ")
    try:
        position = int(input()) - 1
        if 0 <= position < 9 and board[position] == " ":
            board[position] = current_player
            if check_win(current_player):
                print_board()
                print(f"Player {current_player} wins!")
                break
    
```

elif " " not in board:

print_board()

print("It's a draw!")

break

else:

current_player = "O" if current_player == "X" else "X"

else:

print("Invalid input. Try again.")

except ValueError:

print("Invalid input. Enter a number (1-9).")

OUTPUT:

| |

| |

| |

| |

| |

| |

| |

| |

| |

Player X's turn. Enter a position (1-9):

1

/ /

X / /

/ /

/ /

/ /

/ /

/ /

/ /

/ /

Player O's turn. Enter a position (1-9):

2

/ /

X | O |

/ /

/ /

/ /

/ /

/ /

/ /

| |

Player X's turn. Enter a position (1-9):

6

| |

X | O |

| |

| |

| |X

| |

| |

| |

| |

Player O's turn. Enter a position (1-9):

5

| |

X | O |

| |

| |

| O | X

| |

| |

| |

| |

Player X's turn. Enter a position (1-9):

3

| |

X | O | X

| |

| |

| O | X

| |

| |

| |

| |

Player O's turn. Enter a position (1-9):

7

| |

X | O | X

| |

| |

| O | X

| |
O | |

| |

Player X's turn. Enter a position (1-9):

4

| |
X | O | X

| |

| |
X | O | X

| |

| |
O | |

| |

Player O's turn. Enter a position (1-9):

8

| |
X | O | X

| |

| |
X | O | X

| |
O | O |

| |
Player O wins!