

# MOTIONCUT

## TASK-4

To Develop a text-based adventure game using Python.

Create an interactive game where users can make choices that lead to different outcomes.

```
# 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:**

```

| |
| |
| |

```

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| |

| |

| |

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| |

| |

| |

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

2

| |

|X |

| |

-----

| |

| |

| |

-----

| |

| |

| |

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

1

| |

O |X |

| |

-----

| |

| |

| |

-----

| |  
| |  
| |

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

5

| |  
O |X |  
| |

-----

| |  
|X |  
| |

-----

| |  
| |  
| |

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

4

| |  
O |X |  
| |

-----

| |  
O |X |  
| |

-----

| |  
| |  
| |

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

8

| |

O |X |

| |

-----

| |

O |X |

| |

-----

| |

|X |

| |

Player X wins!