

**CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**SUBJECT NAME: PROGRAMMING IN PYTHON**

**TITLE: MINI PROJECT**

**SUBJECT CODE: IT374**

**SEMESTER: 5**

**ACADEMIC YEAR: 2021-22**

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**-: NOUGHTS AND CROSSES GAME USING PYTHON:-**

**Code:**

```
board = {  
    'T1': '', 'T2': '', 'T3': '',  
    'M1': '', 'M2': '', 'M3': '',  
    'D1': '', 'D2': '', 'D3': ''  
}
```

```
player = 1
```

```
total_moves = 0
```

```
end_check = 0
```

```
def check():
```

```
if board['T1'] == 'X' and board['T2'] == 'X' and board['T3'] == 'X':  
    print('Player one won !')  
    return 1  
  
if board['M1'] == 'X' and board['M2'] == 'X' and board['M3'] == 'X':  
    print('Player One Won!!')  
    return 1  
  
if board['D1'] == 'X' and board['D2'] == 'X' and board['D3'] == 'X':  
    print('Player One Won!!')  
    return 1  
  
if board['T1'] == 'X' and board['M2'] == 'X' and board['D3'] == 'X':  
    print('Player One Won!!')  
    return 1  
  
if board['T1'] == 'X' and board['M1'] == 'X' and board['D1'] == 'X':  
    print('Player One Won!!')  
    return 1  
  
if board['T2'] == 'X' and board['M2'] == 'X' and board['D2'] == 'X':  
    print('Player One Won!!')  
    return 1  
  
if board['T3'] == 'X' and board['M3'] == 'X' and board['D3'] == 'X':  
    print('Player One Won!!')  
    return 1  
  
  
if board['T1'] == 'O' and board['T2'] == 'O' and board['T3'] == 'O':  
    print('Player Two Won!!')
```

```
    return 1

    if board['M1'] == 'O' and board['M2'] == 'O' and board['M3'] == 'O':
        print('Player Two Won!!')
        return 1

    if board['D1'] == 'O' and board['D2'] == 'O' and board['D3'] == 'O':
        print('Player Two Won!!')
        return 1

    if board['T1'] == 'O' and board['M2'] == 'O' and board['D3'] == 'O':
        print('Player Two Won!!')
        return 1

    if board['T1'] == 'O' and board['M1'] == 'O' and board['D1'] == 'O':
        print('Player Two Won!!')
        return 1

    if board['T2'] == 'O' and board['M2'] == 'O' and board['D2'] == 'O':
        print('Player Two Won!!')
        return 1

    if board['T3'] == 'O' and board['M3'] == 'O' and board['D3'] == 'O':
        print('Player Two Won!!')
        return 1

    return 0

print('T1|T2|T3')
print('-+- -+-')
print('M1|M2|M3')
```

```
print('- +- +-' )
print('D1|D2|D3')
print('*****')
```

```
while True:
```

```
    print(board['T1']+'|'+board['T2']+'|'+board['T3'])
    print('-+-+-' )
    print(board['M1'] + '|' + board['M2'] + '|' + board['M3'])
    print('-+-+-' )
    print(board['D1'] + '|' + board['D2'] + '|' + board['D3'])
    end_check = check()
```

```
    if total_moves == 9 or end_check == 1:
```

```
        break
```

```
while True:
```

```
    if player == 1:
```

```
        p1_input = input('player one')
```

```
        if p1_input.upper() in board and board[p1_input.upper()] == ' ':
```

```
            board[p1_input.upper()] = 'X'
```

```
            player = 2
```

```
            break
```

```
        else:
```

```
            print('Invalid input, please try again')
```

```
            continue
```

```
    else:
```

```
        p2_input = input('player two')
```

```
if p2_input.upper() in board and board[p2_input.upper()] == ' ':  
    board[p2_input.upper()] = 'O'  
    player = 1  
    break  
else:  
    print('Invalid input, please try again')  
    continue  
total_moves += 1  
print('*****')  
print()
```

**Project description:**

I have developed a project which could be used as game.

In this project I have used if,else condition and while loop which we learnt in this semester.