

Debugging MiniProject.py

For debugging the python file, pdb was used. Breakpoints were set after each game definition, before conditional statements.

Command used to import the pdb module:

```
import pdb
```

Command used to set breakpoints:

```
pdb.set_trace()
```

Commands used to debug through the code:

```
n (next): Execute the current line and stop at the
next one.
c (continue): Continue execution until the next
breakpoint.
q (quit): Exit the debugger and terminate the program.
```

Debugging screenshots:

```
C:\WINDOWS\system32\cmd. x + v
C:\Users\Palak\Desktop>Python minipro.py
> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) c
PYTHON MINI GAMES
Which game would you like to play?
1. Random Number Guess
2. Tic-Tac-Toe
3. Hangman
4. Rock Paper Scissors
5. Dice Simulator
6. Number Pattern
Enter your choice: 1

RANDOM NUMBER GUESS!
The number is a 1-digit number
Enter your guess: 45
Too high. Guess again!
Enter your guess: 30
Too high. Guess again!
Enter your guess: 20
Too high. Guess again!
Enter your guess: 10
Too high. Guess again!
Enter your guess: 5
Too high. Guess again!
Enter your guess: 1
Too low. Guess again!
Oops! You lost!
The number was: 3
```

```
> c:\users\palak\desktop\minipro.py(386)maingame()
-> play_again = input("Play again? (y/n): ").strip().lower()
(Pdb) c
Play again? (y/n): y

> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) c
PYTHON MINI GAMES
Which game would you like to play?
1. Random Number Guess
2. Tic-Tac-Toe
3. Hangman
4. Rock Paper Scissors
5. Dice Simulator
6. Number Pattern
Enter your choice: 2

TIC-TAC-TOE
| |
-----
| |
-----
| |
```

```

| |
Player X, enter a position (0-8): 1
| X |
-----
| |
-----
| |
Player O, enter a position (0-8): 2
| X | O
-----
| |
-----
| |
Player X, enter a position (0-8): 3
| X | O
-----
X | |
-----
| |
Player O, enter a position (0-8): 4
| X | O
-----
X | O |
-----
| |
Player X, enter a position (0-8): 5
| X | O
-----
X | O | X
-----
| |

```

```

| |
Player O, enter a position (0-8): 6
| X | O
-----
X | O | X
-----
O | |
Player O wins!
> c:\users\palak\desktop\minipro.py(386)maingame()
-> play_again = input("Play again? (y/n): ").strip().lower()
(Pdb) c
Play again? (y/n): y

> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) c
PYTHON MINI GAMES
Which game would you like to play?
1. Random Number Guess
2. Tic-Tac-Toe
3. Hangman
4. Rock Paper Scissors
5. Dice Simulator
6. Number Pattern
Enter your choice: 3

```

```

HANGMAN
- - - - -
Guess a letter: m
m - - - -
Guess a letter: e
m e _ _ e
Guess a letter: r
m e r _ e
Guess a letter: g
m e r g e
Congratulations, you've won!
> c:\users\palak\desktop\minipro.py(386)maingame()
-> play_again = input("Play again? (y/n): ").strip().lower()
(Pdb) c
Play again? (y/n): y

> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) c
PYTHON MINI GAMES
Which game would you like to play?
1. Random Number Guess
2. Tic-Tac-Toe
3. Hangman
4. Rock Paper Scissors
5. Dice Simulator
6. Number Pattern
Enter your choice: 4

```

```

C:\WINDOWS\system32\cmd. X + v
ROCK PAPER SCISSORS
How many points do you want to play for? 4
Enter your choice: rock/paper/scissors: rock
You lost! The computer chose paper
Points: You: 0 Computer: 1
Enter your choice: rock/paper/scissors: paper
It's a tie! The computer chose paper
Points: You: 0 Computer: 1
Enter your choice: rock/paper/scissors: rock
You lost! The computer chose paper
Points: You: 0 Computer: 2
Enter your choice: rock/paper/scissors: paper
It's a tie! The computer chose paper
Points: You: 0 Computer: 2
GAME OVER!
Sorry! You lost.
Your points:0
Computer's points:2
Play again? (y/n): y

```

```

> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) c
PYTHON MINI GAMES
Which game would you like to play?
1. Random Number Guess
2. Tic-Tac-Toe
3. Hangman
4. Rock Paper Scissors
5. Dice Simulator
6. Number Pattern
Enter your choice: 5

DICE SIMULATOR
Enter the number of faces on your dice:6
Your random choice is: 1
> c:\users\palak\desktop\minipro.py(386)maingame()
-> play_again = input("Play again? (y/n): ").strip().lower()
(Pdb) c
Play again? (y/n): y

```

```
C:\WINDOWS\system32\cmd. x + v

> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) c
PYTHON MINI GAMES
Which game would you like to play?
1. Random Number Guess
2. Tic-Tac-Toe
3. Hangman
4. Rock Paper Scissors
5. Dice Simulator
6. Number Pattern
Enter your choice: 6
```

```
Welcome to the Number Pattern Game!
Find the next term in this Odd Numbers pattern:
[1, 3, 5, 7, 9, 11]
Your answer: 13
Correct!
Play again? (y/n): y
Find the next term in this Odd Numbers pattern:
[1, 3, 5, 7, 9]
Your answer: 11
Correct!
Play again? (y/n): y
Find the next term in this Odd Numbers pattern:
[1, 3, 5, 7, 9, 11]
Your answer: 13
Correct!
Play again? (y/n): n
Game Over!
Your final score: 3
Play again? (y/n): y

> c:\users\palak\desktop\minipro.py(6)maingame()
-> print("PYTHON MINI GAMES")
(Pdb) n
PYTHON MINI GAMES
> c:\users\palak\desktop\minipro.py(7)maingame()
-> print("Which game would you like to play?")
(Pdb) quit
```

Windows taskbar at the bottom shows the Start button, Search bar, and various application icons including File Explorer, Microsoft Edge, and others. The system tray on the right indicates the language is English (IN), and the date and time are 21:21 on 31-10-2023.