NUMBER GUESSING GAME USING PYTHON

NAME –RINKU BISWAS

BRANCH-CSE(AIML)

SECTION-C

UNIVERSITY ROLL-20240110040015 5

KIET GROUP OF INSTITUTION

INTRODUCTION

- A number guessing game is a simple yet engaging Python program that allows users to guess a randomly generated number within a specified range. The program provides feedback based on the user's guesses, guiding them toward the correct answer. This game helps beginners understand fundamental programming concepts such as loops, conditional statements, user input handling, and random number generation.

METHODOLOGY

1. **Random Number Generation**:
   - The program utilizes Python's random module to generate a random number within a predefined range (e.g., 1 to 100).
2. **User Input Handling**:
   - The player is prompted to enter their guess.
   - The input is validated to ensure it is a number within the specified range.
3. **Comparison Logic**:
   - If the guessed number is lower than the target number, the program informs the user that the guess is too low.
   - If the guessed number is higher, the program indicates that it is too high.
   - If the guess is correct, the program congratulates the user and ends the game.
4. **Looping Mechanism**:
   - The program runs in a loop, allowing the user to guess multiple times until they find the correct number.
   - The number of attempts may be tracked and displayed at the end.
5. **Optional Enhancements**:
   - Limiting the number of attempts to increase difficulty.
   - Implementing different difficulty levels with varying number ranges.
   - Adding a restart option to play again.

PYTHON CODE

```
#Ask user if he/she wants help
need=input("do you need any help : ")
if need == 'yes':
    if yes == 0:
        print("The secret number is even.")
    else:
        print("The secret number is odd.")
else:
    print("Awesome! Let's do it.")

while not guess_correctly:

    # Get the user's guess
        user_guess = int(input("Enter your
guess: "))
        attempt += 1
        if attempt>15:
            print("You have reached
maximum limit of guessing,Try next
time")
            break

        # Check the guess
        if user_guess < secret_number:
            print("Too low! Try again.")
            initial_point=initial_point-10
        elif user_guess >  secret_number:
            print("Too high! Try again.")
            initial_point=initial_point-10

        else:
            print(f"Congratulations! You've
guessed the number in {attempt}
attempts.")
            print(f"You got {initial_point}
points")
            guess_correctly = True
```

```
#imporying a random number
import random
print("You are welcome in Guessing
game")

#user guessing the number
print("I am guessing a number can you
guess it")
secret_number = random.randint(1, 100)

attempt=0
guess_correctly=False
initial_point=100
if secret_number%2==0:
  yes=0
if secret_number%2 !=0:
  yes=1
```

SCREENSHORT OF OUTPUT