**Python Programming Intern**

**Create a Number Guessing Game  
Solution:**

import random # to generate random numbers

def play\_game():

# Step 1: Generate a random number between 1 and 100

secret\_number = random.randint(1, 100)

attempts = 0 # counter for number of guesses

print(" Welcome to the Number Guessing Game!")

print("I have chosen a number between 1 and 100. Can you guess it?")

# Step 2: Repeat until user guesses correctly

while True:

guess = input("Enter your guess: ")

# Step 3: Validate input

if not guess.isdigit():

print("X Please enter a valid number.")

continue

guess = int(guess)

attempts += 1

# Step 4: Compare guess with secret number

if guess < secret\_number:

print("Too low! Try again.")

elif guess > secret\_number:

print("Too high! Try again.")

else:

print(f" Congratulations! You guessed the number {secret\_number} in {attempts} attempts.")

break

# Run the game

if \_\_name\_\_ == "\_\_main\_\_":

play\_game()

**Output :**

**Welcome to the Number Guessing Game!**

**I have chosen a number between 1 and 100. Can you guess it?**

**Enter your guess: 10**

**Too low! Try again.**

**Enter your guess: 20 30**

**X Please enter a valid number.**

**Enter your guess:**