**PASSWORD GENERATOR CODE**

**import random**

**import string**

**def generate\_password(length):**

**if length < 1:**

**return "Password length must be at least 1"**

**# Combine all the possible characters for the password**

**all\_characters = string.ascii\_letters + string.digits + string.punctuation**

**# Generate a random password**

**password = ''.join(random.choice(all\_characters) for i in range(length))**

**return password**

**# Ask the user for the password length**

**length = int(input("Enter the desired password length: "))**

**print("Generated Password: ", generate\_password(length))**

**CALCULATOR CODE**

**def add(num1,num2):**

**print(num1+num2)**

**def subtract(num1,num2):**

**print(num1-num2)**

**def multiply(num1,num2):**

**print(num1\*num2)**

**def divide(num1,num2):**

**if num2 == 0:**

**raise ValueError('Cannot divide by zero')**

**else:**

**print(num1/num2)**

**def calculator():**

**print("Select operation:")**

**print("1. Add")**

**print("2. Subtract")**

**print("3. Multiply")**

**print("4. Divide")**

**while True:**

**choice = input("Enter choice(1/2/3/4): ")**

**if choice in ['1', '2', '3', '4']:**

**num1=float(input("Enter first number: "))**

**num2=float(input("Enter second number: "))**

**if choice == '1':**

**add(num1,num2)**

**elif choice == '2':**

**subtract(num1,num2)**

**elif choice == '3':**

**multiply(num1,num2)**

**elif choice == '4':**

**divide(num1,num2)**

**next\_calculation = input("Do you want to perform another calculation? (yes/no): ")**

**if next\_calculation.lower() != 'yes':**

**break**

**else:**

**print("Invalid Input")**

**calculator()**

**ROCK PAPER SCISSORS GAME CODE**

**import random**

**def display\_rules():**

**rules = """**

**Welcome to Rock, Paper, Scissors!**

**Game Rules:**

**1. Rock beats Scissors.**

**2. Scissors beats Paper.**

**3. Paper beats Rock.**

**4. If both choices are the same, it's a tie.**

**Press Enter to start the game.**

**"""**

**print(rules)**

**input() # Wait for user to press Enter**

**def get\_computer\_choice():**

**choices = ['rock', 'paper', 'scissors']**

**return random.choice(choices)**

**def get\_user\_choice():**

**print("It's your turn!")**

**user\_input = input("Enter your choice (rock, paper, or scissors): ").lower()**

**while user\_input not in ['rock', 'paper', 'scissors']:**

**user\_input = input("Invalid choice. Please enter rock, paper, or scissors: ").lower()**

**return user\_input**

**def determine\_winner(user\_choice, computer\_choice):**

**if user\_choice == computer\_choice:**

**return "It's a tie!"**

**elif (user\_choice == 'rock' and computer\_choice == 'scissors') or \**

**(user\_choice == 'scissors' and computer\_choice == 'paper') or \**

**(user\_choice == 'paper' and computer\_choice == 'rock'):**

**return "You win!"**

**else:**

**return "Computer wins!"**

**def play\_game():**

**display\_rules()**

**while True:**

**user\_choice = get\_user\_choice()**

**print("It's computer's turn now!")**

**computer\_choice = get\_computer\_choice()**

**print(f"You chose: {user\_choice}")**

**print(f"Computer chose: {computer\_choice}")**

**result = determine\_winner(user\_choice, computer\_choice)**

**print(result)**

**play\_again = input("Do you want to play again? (yes or no): ").lower()**

**if play\_again != 'yes':**

**break**

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

**play\_game()**