Phase 1 Project List

Phase 1 Projects

Domain : Python Development Intern

Normal Task 1. Calculator

SOURCE CODE:-

# Function to add two numbers

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

**return** num1 **+** num2

# Function to subtract two numbers

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

**return** num1 **-** num2

# Function to multiply two numbers

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

**return** num1 **\*** num2

# Function to divide two numbers

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

**return** num1 **/** num2

print("Please select operation -\n" \

        "1. Add\n" \

        "2. Subtract\n" \

        "3. Multiply\n" \

        "4. Divide\n")

# Take input from the user

select **=** int(input("Select operations form 1, 2, 3, 4 :"))

number\_1 **=** int(input("Enter first number: "))

number\_2 **=** int(input("Enter second number: "))

**if** select **==** 1:

    print(number\_1, "+", number\_2, "=",

                    add(number\_1, number\_2))

**elif** select **==** 2:

    print(number\_1, "-", number\_2, "=",

                    subtract(number\_1, number\_2))

**elif** select **==** 3:

**print**(number\_1, "\*", number\_2, "=",

                    multiply(number\_1, number\_2))

**elif** select **==** 4:

    print(number\_1, "/", number\_2, "=",

                    divide(number\_1, number\_2))

**else**:

**print**("Invalid input")

Golden Task

2. Random Password Generator

**import** string

**import** random

# Getting password length

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

**print**('''Choose character set for password from these :

         1. Digits

         2. Letters

         3. Special characters

         4. Exit''')

characterList **=** ""

# Getting character set for password

**while**(True):

    choice **=** int(input("Pick a number "))

**if**(choice **==** 1):

        # Adding letters to possible characters

        characterList **+=** string.ascii\_letters

**elif**(choice **==** 2):

        # Adding digits to possible characters

        characterList **+=** string.digits

**elif**(choice **==** 3):

        # Adding special characters to possible

        # characters

        characterList **+=** string.punctuation

**elif**(choice **==** 4):

**break**

**else**:

**print**("Please pick a valid option!")

password **=** []

**for** i **in** range(length):

    # Picking a random character from our

    # character list

    randomchar **=** random.choice(characterList)

    # appending a random character to password

    password.append(randomchar)

# printing password as a string

print("The random password is " **+** "".join(password))