- Name: Aniruddhan N
- Program: Finlatics Data Science Experience/Internhip Program

Q1) Write a Python program that takes user input for their name and greets the user. Then, prompt the user to enter two values. After receiving the values, swap them and print both the ordiginal values and the swapped values.

```
# Prompt the user to enter their name and store it in the variable 'name'
name = input("Enter your name: ")

# Greet the user with their name
print("Welcome to the Program")
print("Hello ",name)

print(" Here is your first program you need to code for: ")

# Prompt the user to enter the first number and convert it to an integer
num1 = int(input('Enter the first number: '))

# Prompt the user to enter the second number and convert it to an integer
num2 = int(input('Enter the second number: '))

# Print the original values of num1 and num2
print("Original number 1:", num1)
print("Original number 2:", num2)

# Swap the values of num1 and num2 using a temporary variable 'temp'
temp = num1
num1 = num2
num2 = temp

# Print the swapped values of num1 and num2
print("Swapped Number 1:", num1)
print("Swapped Number 2:", num2)
```

```
Enter your name: Aniruddhan N
Welcome to the Program
Hello  Aniruddhan N
 Here is your first program you need to code for:
Enter the first number: 39
Enter the second number: 6990
Original number 1: 39
Original number 2: 6990
Swapped Number 1: 6990
Swapped Number 2: 39
```

```
print("Well done")
print("Now onto your second program")
print("Here is your next question: ")
```

```
Well done
Now onto your second program
Here is your next question:
```

Q2) Write a Python program that asks the user to input the radius of a circle. Calculate the area of the circle using the formula area = π * radius^2, where π (pi) is a constant approximately equal to 3.14. Print out the calculated area. Ensure that the user input for the radius is converted to a float data type before performing calculations.

```
radius=int(input("Enter radius of circle:")) #input the radius
radius = float(radius) #type conversion to float
area=3.14*radius*radius #formula creation
print("Area of circle is:",area)  # printing the area of the cirle
```

```
Enter radius of circle:5
Area of circle is: 78.5
```

```
print("Well done")
print("Moving to the 3rd program")
print("Here is your next question: ")
```

```
Well done
Moving to the 3rd program
Here is your next question:
```

Q3) Write a Python program where the user is prompted to input their birth year. The program should then calculate and display the user's current age.

```
# Prompt the user to enter the birth year and birth month
birth_year = int(input("Enter your birth year: "))
birth_month = int(input("Enter your birth month (1-12): "))

# Current year and month
current_year = int(input("Enter the current ongoing year"))
current_month =  int(input("Enter the current month:")) # Assuming the current month is June

# Calculate the initial age based on year difference
age = current_year - birth_year

# Check if the birth year is in the future
if birth_year > current_year:
    print("You are not born yet")
else:
    # Adjust age based on the month
    if birth_month > current_month:
        age -= 1
        months = 12 - (birth_month - current_month)
        print(f"You are: {age} years and {months} months old")
    elif birth_month == current_month:
        print(f"You are: {age} years old")
    else:
        months = current_month - birth_month
        print(f"You are: {age} years and {months} months old")
```

```
Enter your birth year: 2003
Enter your birth month (1-12): 10
Enter the current ongoing year2024
Enter the current month:5
You are: 20 years and 7 months old
```

```
print("Well done")
print("Moving to the 4th program")
print("Here is your question:")
```

```
Well done
Moving to the 4th program
Here is your question:
```

Q4) Imagine you're a bakery owner and you want to personalize messages for your customers.

Write a Python program where customers are prompted to input their name and favorite cake flavor. The program should then print a customized message saying: "Hello, [name]! We're delighted to serve you your favorite [favorite_cake] cake on your birthday. Happy Birthday."

```
name= input("Enter your name:")
favorite_cake=input("Enter your favorite cake flavour:")
print(f"Hello {name}, We're delighted to serve you your favorite {favorite_cake} cake on your birthday. Happy Birthday!")
```

```
Enter your name:Aniruddhan
Enter your favorite cake flavour:Butterscotch
Hello Aniruddhan, We're delighted to serve you your favorite Butterscotch cake on your birthday. Happy Birthday!
```

```
print("Well done")
print("Last but no the least")
print("Moving to the last and final program of the task 1")
print("Here is the question:")
```

```
Well done
Last but no the least
Moving to the last and final program of the task 1
Here is the question:
```

Q5) Write a Python program to calculate the simple interest with user input for principal amount, rate, and time.

```
principal=float(input("Enter principal amount:"))
rate=float(input("Enter rate:"))
time=float(input("Enter time:"))
simple_interest=(principal*rate*time)/100
print("Simple interest is:",simple_interest)
```

```
Enter principal amount:3000
Enter rate:4
Enter time:5
Simple interest is: 600.0
```

Start coding or generate with AI.