**Programming language PYTHON**

**Exercise No 1. Simple variable Assignment**

**Step 1**. Declare a variable name and assign your name to it.

name=”Farah”

**Step 2**. Declare a variable age and assign your age to it.

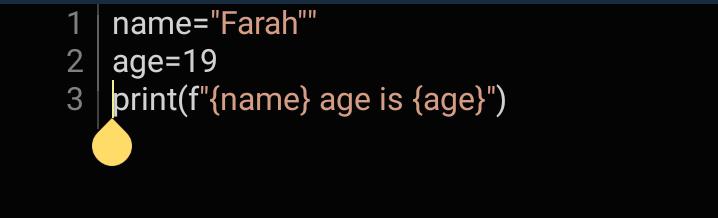
age=19

**Step 3**. Print both variables in readable format.

print(f”{name} age is {age}”)

**Result.**

Farah age is 19

**INPUT:**

**OUTPUT:**

****

**Exercise No 2.** **Multiple variable Assignment**

**Step 1.** Declare three variable num1,num2 and result.

num1=

num2=

result=

**Step 2.** Assign integer value to num1 and num2.

num1=45

num2=62

**Step 3.** Add num1 and num2 and store result in result variable.

num1=45

num2=62

result=num1+num2

**Step 4.** Print the values of all three variables.

print(f”Number1={num1}”)

print(f”Number2={num2}”)

print(f”Number1+Number2={result}”)

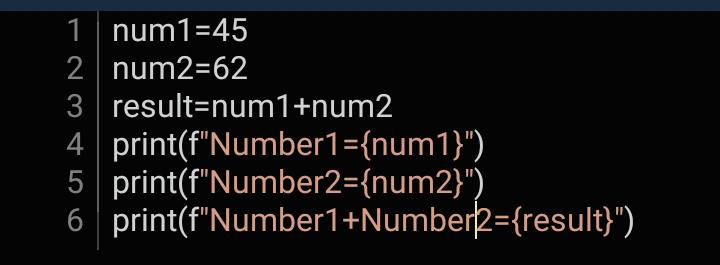
**Result.**

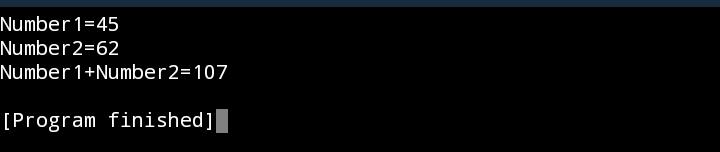
Number1=45

Number2=62

Number1+Number2=107

**INPUT:**

****

**OUTPUT:**

**Exercise No 3. Variable Types**

**Step 1.** Declare a variable price and assign float value to it.

Price=345.7

**Step 2.** Declare a variable quantity and assign the integer value to it.

Quantity=3

**Step 3.** Calculate the total cost (Price\*Quantity) and store it in variable Total\_cost.

Total\_cost=Price\*Quantity

**Step 4.** Print the values of three variables.

print(f”Price={Price}”)

print(f”Quantity={Quantity}”)

print(f”Total Cost={Total\_cost}”)

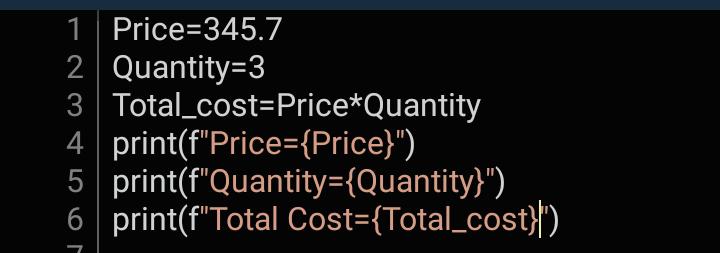
**Result.**

Price=345.7

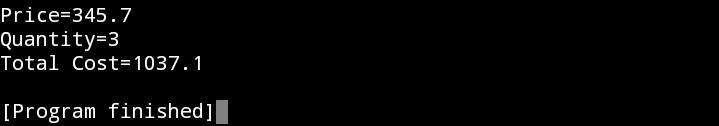
Quantity=3

Total cost=1037.1

**INPUT:**

****

**OUTPUT:**

****

**Exercise No 4. String Concatenation**

**Step 1.** Declare two string variables first\_name and last\_name and assign your first and last name to it.

first\_name=”Farah”

last\_name=”Maqbool”

**Step 2.** Concatenate the two strings and store the result in a variable full\_name.

full\_name=first\_name + “ “ + last\_name

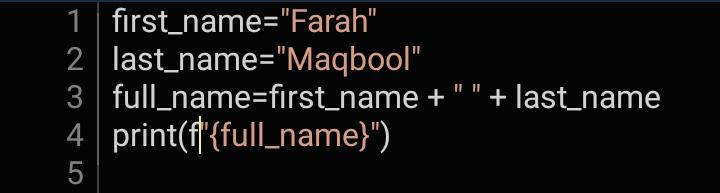
**Step 3.**  Print the full\_name variable.

print(f”{full\_name}”)

**Result:**

Farah Maqbool

**INPUT:**

****

**OUTPUT:**

****

**Exercise No 5.Boolean variable.**

**Step 1.** Declare a Boolean variable is\_adult and assign true if you are above 18 otherwise false.

is\_adult=18

input=input(“Enter your age: “)

**Step 2. Print the value of the is\_adult.**

if int(input)<=is\_adult:

print(“True”)

else:

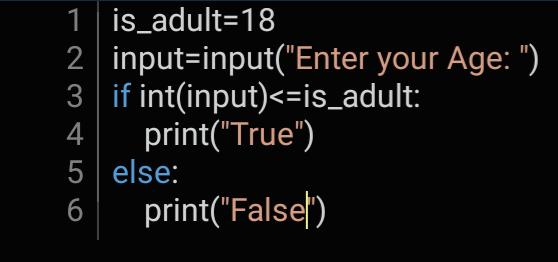
print(“False”)

**Result:**

Enter your age:12

True

**INPUT:**

****

**OUTPUT:**

****

**Exercise No 6. Interactive User input.**

**Step 1.** Use the input() function to get the user name.

Input=input(“Enter User Name”)

**Step 2.** Store the input in a variable called user\_input.

user\_input=input

**Step 3.** Print the personalized greetings using the user\_input.

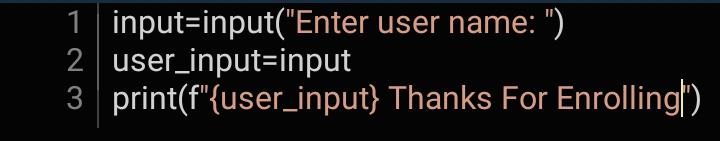
print(f“{user\_input}Thanks For Enrolling”)

**Result.**

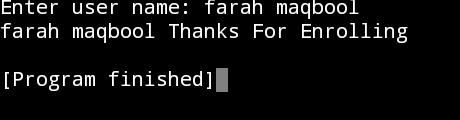
Enter User Name=farahmaqbool

Farahmaqbool Thanks For Enrolling

**INPUT.**

****

**OUTPUT.**

****

**Exercise No 7. Temperature Conversion**

**Step 1. Declare a variable Celsius\_Temperature and assign Celsius temperature to it**

Celsius\_Temperature=45

**Step 2. Convert the Temperature.**

f=(Celsius\_Temperature\* 9/5)+32

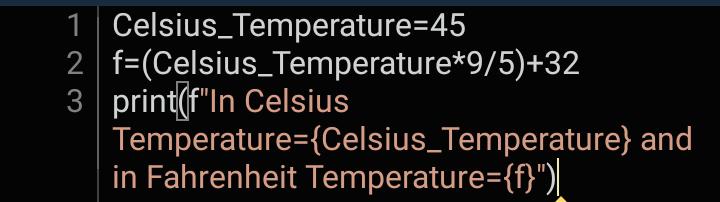
**Step 3. Print original Celsius temperature and convert in Fahrenheit**

print(f”In Celsius Temperature={Celsius\_Temperature} and in Fahrenheit temperature={f}”)

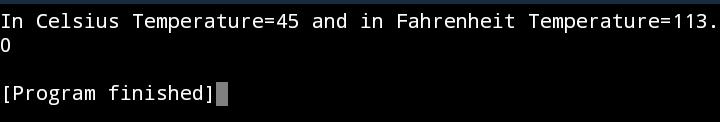
**Result.**

In Celsius Temperature=45 and in Fahrenheit Temperature=113.0

**Input.**

****

**Output.**

****

**Exercise No 8. Swapping Variables.**

**Step 1. Declare two variables a and b and assign values to them**

a=4

b=9

**Step 2. Swap the values of a and b without using the temporary variable.**

a=4

b=9

a,b=b,a

**Step 3.** **Print the values of a and b after swapping.**

print(f”A is {a}”)

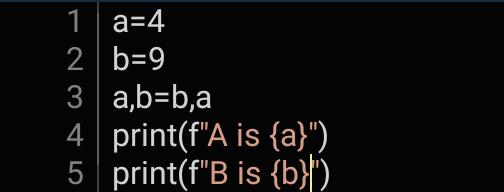
print(f”B is { b}”)

**Result.**

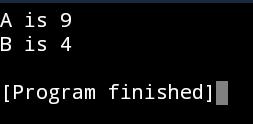
A is 9

B is 4

**Input.**

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**Output.**

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**Exercise No 9.**

**Calculator**

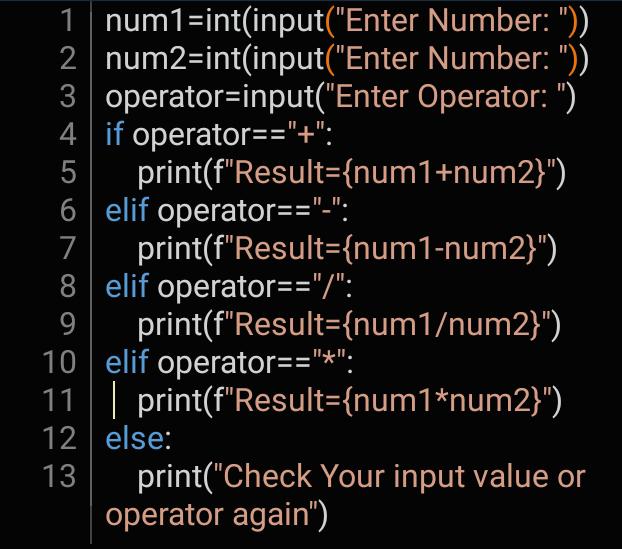
1.Write a Python program that acts as a simple calculator.

2.It should take two numbers and an operator (+, -, \*, /) as input from the user.

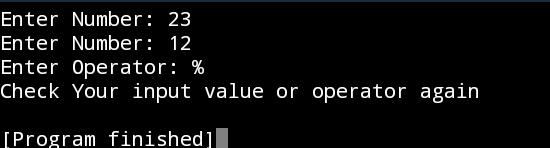
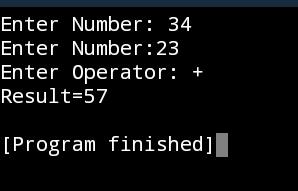
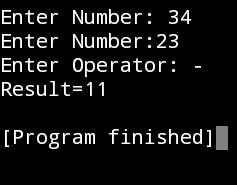
3.Perform the corresponding arithmetic operation and display the result.

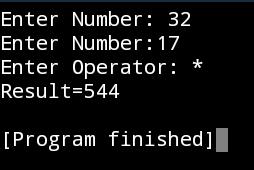
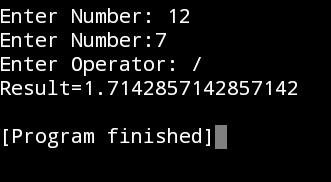
4.Implement error handling to handle cases such as division by zero or invalid operators.

**Input.**

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**Output.**

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