Sample Input:

Books = ₹150

groceries = ₹220

Transport = ₹90

Sample Out:

Total Expenses incurred by karan : ₹460

6/8/25

Task-1

Running python script and various expressions in an interactive interpreter key Terms covered

1.1 karan spent ₹150 on books, ₹220 groceries and ₹90 on transport. Help him calculate the total expenses.

Aim:

To write a python program that total number amount spent by karan on books groceries and transport.

Algorithm:

1) Start the program
2) Accept the amount spent on books, groceries and transport
3) Calcuate the total expenses by summing all three amount
4) Display the total amount spent.
5) End the program.

Program:

```
# program to calculate total expenses of karan
# step1: Assign expense
books = 150
groceries = 220
transport = 90
# step2: calculate total
total_expense = books + groceries + transport
# step3: Display the result
printf("Total expense incurred by karan: ₹", total_expense)
```

Result:

Thus total amount spent by karan on books, groceries, and transport are proved

Sample Input

Enter your weight in kilogram : 70

Enter your height in meter : 1.75

Sample out

Your body mass Index [BMI] is : 22.86

12 Write a BMI calculator. Ask the user for weight (kg) and height (m), then calculate and display their BMI

Aim:

To write a python program that calculates and displays the Body Mass Index (BMI) of a person using their weight (in kilograms) and height (in meters).

Algorithm:

1) Start the program
2) Prompt the user to input their weight in kilograms.
3) Prompt the user to input their heigh in meter
4) Calculate BMI using the formula:

$$BMI = \frac{weight}{height^2}$$

5) Display the calculated BMI
6) End the program.

Program:

```
#BMI Calculator
# step1: Get input from the user
weight = float (input ("Enter your weight in kilograms:"))
height = float (input ("Enter your height in meters:")).
#step2: Calculate BMI
    bmi = weight / (height **2)
#step3: Display result
Print ("your Body Mass Index (BMI) is", round (bmi, 2))
```

Result:

Thus the Body mass Index of a person using their weight (kg) & weight (m) are proved

Sample Input

Side a=8cm

Side b=6cm

Side c=4cm

Sample output

The area of the triangle is :11.62 Squarecm

Riya Laya wants to calculate the area of a triangle with sides of length 8cm, 6cm, and 4cm. Help her write a python program that computes the area using Heron's formula

Aim:

To write a python program to find the area of a triangle when the lengths of all three sides are given, using Heron's formula.

Algorithm:

1) Start the program
2) Accept (or) assign the lengths of the three sides
3) Calculate the semi-perimeter

$$s = \frac{a+b+c}{2}$$

4) Use Heron's formula to calculate the area

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

5) Display the area of the triangle
6) End the program.

Python Program:

```
import math
#step1: Assign side lengths
a=8
b=6
c=4
#step2: Calculate semi-perimeter
a = (a+b+c)/2
#step3: Apply Heron's formula
area = math.sqrt(s*(s-a)*(s-b)*(s-c))
#step4: Display result
print("The area of the triangle is", round(area,2)
"square cm")
```

X NO.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	3
RECORD (4)	4
TOTAL (15)	15
SIGN WITH DATE	

Result: Thus the area of triangle when the length of all three sides are given, using Heron's formula