Program :-

```
# program to calculate total expenses of karan
# step 1 : Assign expenses
    books = 150
   groceries = 220
    transport = 90
#step 2 : calculate total
  total - expense = books + groceries + transport
# step 3 : Display the result
   print ("Total expenses incurred by karan : =", total
                                                 expense)
```

Input :-

Books = ₹150

Groceries = ₹220

Transport = ₹90

Output :

Total expenses incurred by karan. = ₹460

TASK 10 : J-1

Date : 06/08/25

Aim :- To write a python program that calculates the total 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. calculate the total expenses by summing all three amounts
4. Display the total amount spent.
5. End the program.

Result :-

The program was successfully executed and the total amount spent by karan was calculated and displayed as expected

Program:-

```
# BMI calculator
# step 1 : Get input from the user.
weight = float (input ("enter your weight in kilograms: "))
height = float (input ("Enter your height in meters : "))

# step 2 : calculate BMI
bmi = weight / (height **2)

# step 3 : Display result.
Print ("Your Body mass Index (BMI) is : " round (bmi,2))
```

Input :-

```
Enter your weight in kilograms : 70
Enter your height in meters : 1.75
```

output :-

```
your Body mass Index (BMI) is : 22.86
```

Task NO :- 1.2

Date : 06/08/25

Aim :- To write a python program that calculates and display 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 height in meters.
4) Calculate the BMI using the formola :

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

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

Result :-

The program was sucessfully executed on the total mass Index of a person was calculated and displayed executed

Program:

```
import math
# step 1 : Assign side lengths
    a = 8
    b = 6
    c = 4
# step2 : calculate semi-perimeter.
    s = (a+b+c)/2
# step 3 : Apply Heron's formula.
  area = math.sqrt (s*(s-a)*(s-b)*(s-c))
#step 4 : Display result
  print ("The area of the triangle is :", round (area, 2),
                                        "square cm")
```

Input:

Side a = 8 cm

side b = 6 cm

side c = 4 cm

output :

The are of the triangle is : 11.62 sq cm

Task NO :- 7.3

Date : 06/08/25

Aim: TO write Python program to find the area of triangle when the length of all three sides are given, using Hero'n's formula.

Algorithm :-

1) start the program

2) Accept or assign the lengths of the three sides : a, b & c.

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) find the Program.

V[illegible] - SCORE	
EX NO.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	3
RECORD (4)	4
TOTAL (15)	15
SIGN WITH DATE	

6/8

Result :- The Program was succesfully executed & the area of the triangle using Heron's formula was calculated and displayed as expected