USER INPUT

1. Write a program to find the area, perimeter and diagonal of a rectangle.
   Area= L * W Perimeter = 2 *(L + W) Diagonal=$\sqrt{l^2 + w^2}$

2. Write a program to find the area and circumference of a circle ring, whose outer and inner radii are 45cm and 20 cm. Circumference=2πR Area= π($r1^2 - r2^2$)

3. Write a program to accept the marks of student in Physics, Chemistry and Biology. Display the total marks and average marks.

4. Write a program to accept the number of days and display the result after converting into number of years, number of months and the remaining number of days.

5. Write a program to find the area and perimeter of triangle. area =$\frac{hb}{2}$, P=a+b+c .

6. Write a program to find the volume of cube. Volume=l*w*h

7. Write a program to find area of the pentagon. [$\frac{5}{2}sa$] Where,s is the side, a is the apothem length.

8. Write a program to find area of Rhombus. [area= $\frac{d1d2}{2}$] d=length of diagonal

9. Write a program to find the area of the Equilater Triangle. [area= $\frac{s^2\sqrt{3}}{4}$] s=length of side.

10. Write a program to find the volume of sphere. [v=$\frac{4}{3}\pi r^3$]

11. Write a program to find the area of a parallelogram whose breadth is 8 cm and height is 11 cm. [Area = b × h] Where, **b** is the length of any base and **h** is the corresponding altitude or height

12. Write a program to find the area of a sector of a circle whose radius is 8 cm and the angle made at the center of the circle is 45° **Area of a Sector Formula** is, A=$\pi r^2 \frac{\theta}{360}$

13. Write a program to calculate the value of the given expression:

Tan(A – B)= $\frac{TanA - TanB}{1+Tan\,A*TanB}$ [radian= (22.0/(7.0*180))*degree]

14. Write a program to find the base area , surface area and volume of square pyramid.
   BaseAreaofaSquarePyramid=b^2 SurfaceAreaofaSquarePyramid=2bs+b^2
   VolumeofaSquarePyramid=$\frac{1}{3}b^2h$ [**b –** base length **s –** slant height **h –** height]

15. Write a program to find the base area , surface area and volume of Pentagonal pyramid.
   BaseArea= $\frac{5}{2}ab$ SurfaceArea== $\frac{5}{2}ab + \frac{5}{2}bs$ Volume=$\frac{5}{6}$ abh. [a – apothem length, b – base length, s – slant height, h – height of the pentagonal pyramid.]