1) Write a program to store the side of a square which is 4.5cm, calculate and print the area and perimeter.

2) Write a program to calculate and print the circumference and area of a circle with radius 3.5cm with appropriate messages.

3) Write a program to print the following without giving "i am " more than once.
"My name is XXXX.I am studying in XXX.I am in class XXX.I am learning python manipulator-sep."

4) Write a program to assign 3 different nos in words. Join them in such a way that they form a number in words with the first no in the unit place ,second in tens place and third in hundreds place. If words are 'one','twenty','three' then the result should be 'three hundred twenty one'

5) Write a program to calculate the S.I and C.I for Rs.10,000 principal amt for 3 yrs at rate of interest 5%. Print all details with appropriate messages.

6) Write a program to calculate the bill amount by multiplying the price(Rs.34) and quantity(22 units) of a Medicine purchased. The Total bill amount is shown in the bill which is calculated after adding 5% of GST in the bill amount.

BILL

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ITEM	PRICE	QUANTITY	BILL AMOUNT

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ITEM	PRICE	QUANTITY	BILL AMOUNT
MEDICINE	34	22	748
		GST 5%	37.4

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		TOTAL BILL AMOUNT	785.4

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7) Write a Python program to convert temperature in degree Celsius to degree Fahrenheit. If water boils at 100 degree C and freezes as 0 degree C, use the program to find out what is the boiling point and freezing point of water on the Fahrenheit scale.
(Hint: T(°F) = T(°C) × 9/5 + 32)

8) The volume of a sphere with radius r is $4/3\pi r^3$. Write a Python program to find the volume of spheres with radius 7cm, 12cm, 16cm, respectively.

9) Presume that a ladder is put upright against a wall. Let variables length and height store the length of the ladder and the height at which the ladder touches the wall. Write a Python program to compute the distance between the ladder and the wall for the following values of length and height:
a) 25 feet and 20 feet
b) 15 feet and 12 feet
c) 16 feet and 10 feet

10) Write a program to calculate and print If L = 1000 and N=45; what must be subtracted from L to make it exactly divisible by N.

11) Get the value of cscm, check and print True
   a) if it is between 50 and 70
   b) if it is 60 or 50
   c) if it is <75 or >100
   Print False otherwise

12) Accept the date,month and year of birth of your friend and print it in dd/mm/yyyy format

13) Write a program to accept a three digit number, extract the digits and print its reverse form along with the sum of the digits.

14) Write a program to accept 2 different nos and do the following
   a. Print the square of the sum of the nos.
   b. The difference between the exact quotient and integer quotient when first no is divided by the second.
   c. Form a third no which is 3(1st no) - 2(2nd no)
   d. Interchange the values of n1 and n2 if the first number is stored in n1 and the second in n2.

15) Write a program that asks the user to enter their name and age. Print a message addressed to the user that tells the user the year in which they will turn 100 years old.

16) The formula $E = mc^2$ states that the equivalent energy (E) can be calculated as the mass (m) multiplied by the speed of light (c = about 3×10^8 m/s) squared. Write a program that accepts the mass of an object and determines its energy.

17) Write a program to repeat the string "GOOD MORNING" n times. Here n is an integer entered by the user.

18) Take name, roll number and field of interest from user and print in the below format : Hey, my name is xyz and my roll number is xyz. My field of interest is xyz

19) Write a program to obtain x,y,z from user and calculate expression: $4x^4+3y^3+9z+6$

20) Accept the base and height of 3 different triangles print the area of each triangle with appropriate messages.

21) Accept the 5 different test marks of a student in Computer Science, calculate the final marks out of 70 using the table given below

Test name	maximum mark	%taken to compute final mark
Unit test -1	25	10%
Unit test - 2	25	10%
PA-1	70	20%
PA-2	70	20%
Annual	70	40%

22) Generate the following pattern using the accepted character from the user

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*
* *
* * *
* * * *
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23) Write a program to accept the basic salary, % of allowances (DA,HRA,TA) and amount to be deducted. Calculate the gross salary by adding the allowances with basic salary and net salary by deducting the amount to be deducted. Print basic salary, DA, HRA, TA, Gross salary, deductions and net salary in a neat format

24) Write a program to accept the name from the user and display a welcome message if the name is Kannan .

25) Accept a number and if it is a single digit number,print its negative form.

26) Accept the radius of a circle and the result to be calculated (a for area c for circumference). depending on the choice calculate the result and print with appropriate messages.

27) Accept two numbers and an arithmetic operator(+,-,*,/,%,//) from the user. Depending on the arithmetic operator perform the operation and print the result with appropriate messages. Display the message as "invalid operator" otherwise. Execute the program at least for 3 times.

28) Accept an alphabet from the user check and print the appropriate rainbow color (VIBGYOR). Case differences of the alphabet input should be ignored i.e., if the user input 'v' or 'V' the color Violet should be printed. Display "no appropriate color found" otherwise.