Write C programs for the following:

1. Ramesh's basic salary is input through the keyboard. His dearness allowance is 40% of basic salary, and house rent allowance is 20% of basic salary. Write a program to calculate his gross salary.

2. The distance between two cities (in km.) is input through the keyboard. Write a program to convert and print this distance in meters, feet, inches and centimeters.

3. If the marks obtained by a student in five different subjects are input through the keyboard, find out the aggregate marks and percentage marks obtained by the student. Assume that the maximum marks that can be obtained by a student in each subject is 100.

4. Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a program to convert this temperature into Centigrade degrees.

5. The length & breadth of a rectangle and radius of a circle are input through the keyboard. Write a program to calculate the area & perimeter of the rectangle, and the area & circumference of the circle.

6. Two numbers are input through the keyboard into two locations C and D. Write a program to interchange the contents of C and D.

    6.1 Using third variable
    6.2 without using third variable
    6.3 Not using third variable , use arithmetic operator (except + and -)
    6.4 Without using third variable and without using arithmetic operator.

7. If a five-digit number is input through the keyboard, write a program to calculate the sum of its digits. (Hint: Use the modulus operator '%')

8. If a five-digit number is input through the keyboard, write a program to reverse the number.

9. If a four-digit number is input through the keyboard, write a program to obtain the sum of the first and last digit of this number.

10. In a town, the percentage of men is 52. The percentage of total literacy is 48. If total percentage of literate men is 35 of the total population, write a program to find the total number of illiterate men and women if the population of the town is 80,000.

11. A cashier has currency notes of denominations 10, 50 and 100. If the amount to be withdrawn is input through the keyboard in hundreds, find the total number of currency notes of each denomination the cashier will have to give to the withdrawer.

12. If the total selling price of 15 items and the total profit earned on them is input through the keyboard, write a program to find the cost price of one item.

13. Write a C program to enter radius of a circle and find its diameter, circumference and area.

14. Write a C program to enter temperature in Celsius and convert it into Fahrenheit.

15. Write a C program to convert days into years, weeks and days(ignore leap year).

16. Write a C program to find power of any number x ^ y.

17. Write a C program to enter any number and calculate its square root.

18. Write a C program to enter two angles of a triangle and find the third angle.

19. Write a C program to enter base and height of a triangle and find its area.

20. Write a C program to calculate area of an equilateral triangle.

21. Write a C program to enter marks of five subjects and calculate total, average and percentage.

22. Write a C program to enter P, T, R and calculate Simple Interest.

23. Write a C program to enter P, T, R and calculate Compound Interest.