1. A five digit number is entered. Write a C program to reverse the number and check whether entered number and reversed number are same or not.
2. Create a MENU involving all the arithmetic operations (Addition, Subtraction, Multiplication, Division, Modulus, etc) and print the required output upon entering specific case input. Use Switch case. Continue this process until user enters invalid input.
3. Any character is entered through keyboard. Write a program to check whether character entered is small case, capital case, digit or special character.
4. Use ternary operator to check whether the entered year is leap or not.
5. Use conditional operator to convert lower case to upper case and vice versa.

6. Write a C Program to evaluate an arithmetic expression.
7. x1 = (-b+√ (b^2-4ac))/2a, where ^ denotes x raise to the power y,
8. e.g. b2 x2 = (-b-√ (b^2-4ac))/2a

   Input variables in given formula: a, b, c

   Output variables in given formula: x1 and x2

9. Write a C Program that will take input as two numbers/characters. Swap contents of two input variables without using any 3rd variable.
10. Write an interactive program in C to demonstrate the process of multiplication. The program should ask the user to enter two-digit integers and print the product of integers as shown below:

```
        45
      * 37
——----------------
7 * 45 is   315
3 * 45 is   135
——----------------
Add them  1665
——----------------
```

11. Write a program to accept a name and basic salary of an employee calculate and display the gross salary Program in C. Gross salary of an employee in C. Gross salary is calculated annual basis we can calculate a gross salary by using the following formula (Gross salary = Net Salary - Deduction.) Deduction = Tax (HRA. + DA. +

MA.). Write a program to calculate net salary after inputting Basic Salary, HRA, DA and Tax

12. Area of a circle of radius R is given by (Area=PI * R*R). Write a C program to calculate the area of a circle. Also find circumference of circle.
13. Write a C program to accept a coordinate point in an XY coordinate system and determine in which quadrant the coordinate point lies.
14. Write a C program to read the roll no, name and marks of three subjects and calculate the total, percentage and division.

Expected output :

Roll No : bt22cse192
Name of Student : Raj
Marks in Physics : 70
Marks in Maths : 80
Marks in Computer Application : 90
Total Marks = 240
Percentage = 80.00
Division = First

Write a C program to accept the height of a person in centimeters and categorize the person according to their height

15. Write a C program to calculate the root of a quadratic equation If b2 – 4ac > 0 then the quadratic function has two distinct real roots. - If b2 – 4ac = 0 then the quadratic function has one repeated real root. If b2 – 4ac < 0 then roots are imaginary. Also print the values of roots.