

Problem 01:

1) C program with Conditional statement to convert temperature from Fahrenheit to Celsius and Celsius to Fahrenheit

```
Press c to convert temperature from Fahrenheit to Celsius.  
Press f to convert temperature from Celsius to Fahrenheit.  
Enter your choice (c, f): f  
  
Enter temperature in Celsius: 37  
  
Temperature in Fahrenheit: 98.60
```

Problem 02:

Check whether the triangle is equilateral, scalene, or isosceles

Before writing the program, we should know the properties of isosceles, equilateral, and scalene triangles.

Isosceles triangle: In geometry, an isosceles triangle is a triangle that has two sides of equal length.

Equilateral triangle: In geometry, an equilateral triangle is a triangle in which all three sides are equal.

Scalene triangle: A scalene triangle is a triangle that has three unequal sides.

```
Enter first side of triangle: = 3
Enter second side of triangle: = 3
Enter third side of triangle: = 3
Equilateral triangle.
```

```
Enter first side of triangle: = 5
Enter second side of triangle: = 6
Enter third side of triangle: = 7
Scalene triangle.
```

```
Enter first side of triangle: = 4
Enter second side of triangle: = 6
Enter third side of triangle: = 4
Isosceles triangle.
```

Problem 03:

C program to enter student marks and find percentages and grades.

A college has the following rules for the grading system:

1. Below 25 – F

2. 25 to 45 – E

3. 45 to 50 – D

4. 50 to 60 – C

5. 60 to 80 – B

6. Above 80 – A

Ask the user to enter the mark of 1 subject and print the corresponding grade.

Problem 03:

Three Integer numbers are given as Input. Find the middle one!

Problem 04:

Write a C program to Check whether a number is perfectly Square or not.

First Run:

```
Enter an integer number: 16
16 is a perfect square.
```

Second Run:

```
Enter an integer number: 26
26 is not a perfect square.
```

Problem 05:

A Company Decided to give a bonus of 5% to the employee if their year of service is more than 5 years. Ask Employees for **their salary and year of service and print the net bonus amount**

Problem 06:

A student will not be allowed to sit in the exam if his/her attendance is less than 75%.

Take the following input from user:

**{ Number of classes held &
The number of classes he/she attended.}**

And print the percentage of classes he/she attended and verify if the student is allowed to sit in the exam or not?

Problem 07:

A shop will give a discount of 10% if the cost of the purchased quantity is more than 1000.

Ask the user for quantity. Judge and print the total cost for the user.

Problem 08:

Ask the user to enter **age, and sex (M or F)**, and then using the following rules print their place of service.

if the employee is female, then she will work only in urban areas.

if the employee is a male and his age is between 20 to 40 then he may work in anywhere

if the employee is male and his age is between 40 to 60 then he will work in urban areas only.

And any other input of age should print "ERROR".

Problem 09:

Using the if-else C Program to take a value from the user as input electricity unit charges and calculate the total electricity bill according to the given condition:

For the first 50 units Rs. 0.50/unit

For the next 100 units Rs. 0.75/unit

For the next 100 units Rs. 1.20/unit

For units above 250 Rs.1.50/unit

**** An additional surcharge of 20% is added to the bill ****

Problem 10:

Calculate profit or loss by using the if-else statement. Take these inputs from the user:

- **Cost Price**
- **Selling Price**

Sample Output

enter cost price:

400

enter selling price:

200

loss of 200