ECS-102 LAB TASK 4 - C IF ELSE STATEMENTS

Example:

Write a program which takes length and breadth of a rectangle as an input from the user and asks for the choice for calculating either Area, Perimeter or Diagonal.

Algorithm:

- Define Variables choice, length, breadth, perimeter, area, and diagonal.
- Print “Rectangle Menu”
- Print “1. Area”
- Print “2. Perimeter”
- Print “3. Diagonal”
- Print “Enter your choice”
- Take input for the variable choice
- If choice = 1 or choice = 2 or choice = 3
- Take input for variables length and breadth
- If choice =1, area = length * breadth and print area
- Else, If choice = 2, perimeter = 2*(length + breadth) and print perimeter
- Else, $diagonal^2 = length^2 + breadth^2$ and print diagonal
- Else, print “Wrong Choice”

Program:

```
#include<stdio.h>

int main()
{
  int length, breadth, area, perimeter, diagonal, choice;
  printf("\nRectangle menu: ");
  printf("\n1.Area  ");
  printf("\n2.Perimeter  ");
  printf("\n3.Diagonal  ");
  printf("\nEnter your choice: ");
  scanf("%d", &choice);

 printf("\nEnter the Length of Rectangle : ");
  scanf("%d", &length);
  printf("\nEnter the Breadth of Rectangle : ");
  scanf("%d", &breadth);

if (choice==1)
{
  area = length * breadth;
  printf("\nArea of Rectangle : %d", area);
}
else if (choice==2)
{
  perimeter = 2*(length + breadth);
  printf("\nPerimeter of Rectangle : %d", perimeter);
}
else
{
diagonal = (length2 + breadth2 )^0.5;
printf("\nDiagonal of Rectangle : %d", diagonal);
 }
  return (0);
}
```

LAB TASK 4:

For each question write algorithm and code and submit it in the assignment created. Algorithm can be hand written (jpg) or a document (word/pdf).

1) WAP to create a four-function calculator. The program requires the user to enter two numbers and an operator. It then performs arithmetic operation: addition, subtraction, multiplication and division.

2) Write a temperature-conversion program that gives the user the option of converting FAHRENHEIT to CELSIUS or CELSIUS to FAHRENHEIT and depending upon user's choice carries out the conversion.

Use this formula for temp conversion: C = (F-32)/1.8

3) Write a program to input number of week's day (1-7) and translate to its equivalent name of the day of the week (eg. 1 to Sunday, 2 to Monday,….., 7 to Saturday).

4) Write a program which takes a character as an input from the user and displays whether the character is a vowel or a consonant.

Instruction for Lab task submission :
You need to save the code file with .c extension and upload and turn in .c file in your respective Google classroom lab.

Save your .c file as "rollno_task2_Qno.c"

For eg. 2010704_task2_q1.c