```c
/*
P4:
Design and develop a program in a language of your choice to solve the triangle
problem defined as follows:
Accept three integers which are supposed to be the three sides of a triangle
and determine if the three values represent an equilateral triangle,
isosceles triangle, scalene triangle or they do not form a triangle at all.
Assume that the upper limit for the size of any side is 10.
Derive test cases for your program based on
boundary-value analysis,
equivalence class partitioning and
decision-table approach and execute the test cases and discuss the results.
*/



#include <stdio.h>
#include <stdlib.h>

int main()
{
    int a,b,c;

    printf("Enter the values for the sides of triangle\n");
    scanf("%d%d%d",&a,&b,&c);

    if((a>=1&&a<=10)&&(b>=1&&b<=10)&&(c>=1&&c<=10))
        printf("Valid input\n");
    else
    {
        printf("Invalid Input");
        exit(0);
    }

    if((a<(b+c))&&(b<(a+c))&&(c<(a+b)))
        printf("Triangle can be formed\n");
    else
    {
        printf("Triangle cannot be formed\n");
        exit(0);
    }

    if((a==b)&&(b==c))
        printf("It is an Equilateral Triangle\n");
    else
    {
        if((a!=b)&&(b!=c)&&(c!=a))
            printf("It is a scalene triangle\n");
        else
            printf("It is an isosceles triangle\n");
    }

    return 0;
}
```