Ex 3.1-
```c
#include <stdio.h>

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

    Printf("Enter three sides of Triangle:");
    scanf("%d %d %d", &a, &b, &c);

    if ((a+b > c) && (a+c > b) && (b+c > a)) {
        if (a == b && b == c) {
            Printf("The triangle is Equilateral.\n");
        }
        else if (a == b || b == c || a == c) {
            Printf("The triangle is Isosceles.\n");
        }
        else {
            Printf("The triangle is Scalene.\n");
        }
    }
    else {
        Printf("The given sides do not form triangle.\n");
    }
    return 0;
}
```

2- # i
int

C main.c M ✕

C main.c > ⬡ main()

```c
 2
 3    int main() {
 4        int a, b, c;
 5
 6        // Input sides of the triangle
 7        printf("Enter three sides of the triangle: ");
 8        scanf("%d %d %d", &a, &b, &c);
 9
10        // First check if the triangle is valid
11        if ((a + b > c) && (a + c > b) && (b + c > a)) {
12            // Classification
13            if (a == b && b == c) {
14                printf("The triangle is Equilateral.\n");
15            }
16            else if (a == b || b == c || a == c) {
17                printf("The triangle is Isosceles.\n");
18            }
19            else {
20                printf("The triangle is Scalene.\n");
21            }
22        }
23        else {
24            printf("The given sides do not form a valid triangle.\n");
25        }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

```
abhaygupta@192 main.c % ./a.out
Enter three sides of the triangle: 3
3
3
The triangle is Equilateral.
abhaygupta@192 main.c % gcc main.c
abhaygupta@192 main.c % ./a.out
Enter three sides of the triangle: 3
3
4
The triangle is Isosceles.
abhaygupta@192 main.c % gcc main.c
abhaygupta@192 main.c % ./a.out
Enter three sides of the triangle: 2
3
4
The triangle is Scalene.
```

EXPLORER

∨ OPEN EDITORS
✕ C main.c   M

∨ MAIN.C
  > .vscode
  > main.dSYM
  C #include <stdio.c   U
  ☰ a.out   U
  C hello.c   U
  ☰ main   U
  C main.c   M
  ☰ tempCodeRunnerFile   U
  ☰ Untitled-1   U

> OUTLINE
> TIMELINE

⌥ main*+ ⊗0 ⚠0