```c
1   // Q19: Write a program to classify a triangle as Equilateral, Isosceles, or Scalene based on its side lengths.
2
3   /*
4   Sample Test Cases:
5   Input 1:
6   3 3 3
7   Output 1:
8   Equilateral
9
10  Input 2:
11  3 3 4
12  Output 2:
13  Isosceles
14
15  Input 3:
16  2 3 4
17  Output 3:
18  Scalene
19
20  */
21
22  #include <stdio.h>
23  int main()
24  {
25      int x, y, z;
26      printf("enter the side =\n");
27      scanf("%d %d %d", &x,&y,&z);
28
29      if (x + y <= z || y + z <= x || z + x <= y)
30      {
31          printf("NOT A TRIANGLE\n");
32      }
33      else if (x == y && y == z && z == x)
34      {
35          printf("THIS IS AN EQUILATERAL TRIANGLE\n");
36      }
37      else if (x == y || y == z || z == x)
38      {
39          printf("THIS IS AN ISOSCELES TRIANGLE\n");
40      }
41      else
42      {
43          printf("THIS IS A SCALENE TRIANGLE\n");
44      }
45      return 0;
46  }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\diff_triangles.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
enter the side =
3 3 3
THIS IS AN EQUILATERAL TRIANGLE
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\diff_triangles.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
enter the side =
3 3 4
THIS IS AN ISOSCELES TRIANGLE
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\diff_triangles.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
enter the side =
2 3 4
THIS IS A SCALENE TRIANGLE
PS C:\Users\drago\OneDrive\Desktop\C H.W>
```

C day10_q20.c > ⓧ main()

```c
// Q20: Write a program to display the day of the week based on a number (1-7) using switch-case.

/*
Sample Test Cases:
Input 1:
1
Output 1:
Monday

Input 2:
5
Output 2:
Friday

*/

#include <stdio.h>

int main() {
    int day;
    scanf("%d", &day);
    switch(day) {
        case 1: printf("Monday\n"); break;
        case 2: printf("Tuesday\n"); break;
        case 3: printf("Wednesday\n"); break;
        case 4: printf("Thursday\n"); break;
        case 5: printf("Friday\n"); break;
        case 6: printf("Saturday\n"); break;
        case 7: printf("Sunday\n"); break;
        default: printf("Invalid day\n");
    }
    return 0;
}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\day10_q20.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
1
Monday
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\day10_q20.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
5
Friday
PS C:\Users\drago\OneDrive\Desktop\C H.W>
```