

# WEEK4: C lab

Name: Sabique

SRN: PES2UG24CS421

Section: N

Batch: N-2

```
#include <stdio.h>
int main() {
    int a, b, c; int triangleType;
    printf("Enter the lengths for each side: \n");
    scanf("%d %d %d", &a, &b, &c);
    if ((a + b <= c) || (b + c <= a) || (a + c <= b)) {
        printf("Invalid triangle...\n");return 0; }
    if (a == b && b == c) {
        triangleType = 1;
    } else if (a == b || b == c || a == c) {
        triangleType = 2;
    } else {
        triangleType = 3;
    }
    switch (triangleType) {
        case 1:
            printf("Equilateral Triangle...\n");
            break;
        case 2:
            printf("Isosceles Triangle...\n");
            break;
        case 3:
            printf("Scalene Triangle...\n");
            break;}}
}
```

Enter the lengths for each side:  
6 8 10  
Scalene Triangle...

=== Code Execution Successful ===

```
1 #include <stdio.h>
2
3 int main() {
4     int a,b,c;
5     printf("Enter the lengths for each side: \n");
6     scanf("%d %d %d", &a, &b, &c);
7
8     if((a+b<=c) || (b+c<=a) ||(a+c<=b)){
9         printf("Invalid triangle...\n");
10    }else{
11        if(a==b && b==c){
12            printf("Equilateral Triangle...\n");
13        }
14        else if ((a==b)||(b==c)||(a==c)){
15            printf("Isosceles Triangle...\n");
16        }
17        else{
18            printf("Scalene Triangle...\n");
19        }
20    }
21
22    return 0;
23 }
```

Enter the lengths for each side:  
4 4 6  
Isosceles Triangle...

=== Code Execution Successful ===

```

1 #include <stdio.h>
2
3 int main() {
4     int n, i, j, isPrime;
5     printf("Enter a number: ");
6     scanf("%d", &n);
7     printf("Prime numbers from 1 to %d are:\n", n);
8     for (i = 2; i <= n; i++) {
9         isPrime = 1;
10
11         for (j = 2; j < i; j++) {
12             if (i % j == 0) {
13                 isPrime = 0;
14                 break;
15             }
16         }
17         if (isPrime)
18             printf("%d ", i);
19     }
20     printf("\n");
21     return 0;
22 }

```

```

Enter a number: 400
Prime numbers from 1 to 400 are:
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97 101
103 107 109 113 127 131 137 139 149 151 157 163 167 173 179 181 191 193
197 199 211 223 227 229 233 239 241 251 257 263 269 271 277 281 283 293
307 311 313 317 331 337 347 349 353 359 367 373 379 383 389 397

```

=== Code Execution Successful ===

```

1 #include <stdio.h>
2
3 int main() {
4
5     int row;
6     int num=1;
7     printf("Enter number of rows: ");
8     scanf("%d", &row);
9
10    for(int i=1; i<=row; i++){
11        for(int j=1; j<=i; j++){
12            printf("%d ", num);
13            num++;
14        }
15        printf("\n");
16    }
17
18    return 0;
19 }

```

```

Enter number of rows: 4
1
2 3
4 5 6
7 8 9 10

```

=== Code Execution Successful ===

```

1 #include <stdio.h>
2
3 int main(){
4     int num, i=1;
5     printf("Enter a number: ");
6     scanf("%d",&num);
7
8     do{
9         printf("%d x %d = %d\n", num, i, num*i);
10        i++;
11    }
12    while(i<=10);
13
14    return 0;
15 }

```

```

Enter a number: 10
10 x 1 = 10
10 x 2 = 20
10 x 3 = 30
10 x 4 = 40
10 x 5 = 50
10 x 6 = 60
10 x 7 = 70
10 x 8 = 80
10 x 9 = 90
10 x 10 = 100

```

=== Code Execution Successful ===