CSE115L – Computing Concepts Lab
Lab 04

`if` statement:

```
#include<stdio.h>
int main()
{
   if(1)
    printf("The statement is true");
  return 0;
}
```

```
#include<stdio.h>
int main()
{
   if(0)
    printf("The statement is true");
  return 0;
}
```

`if else` statement:

```
#include<stdio.h>
int main()
{
  int i=5,j=4;
  if(i>j)
     printf("I is Greater than J");
  else
     printf("J is Greater than I ");

  return 0;
}
```

```
#include<stdio.h>
int main()
{
  int i=2,j=4;
  if(i>j)
     printf("I is Greater than J");
  else
     printf("J is Greater than I ");

  return 0;
}
```

`if - else if - else` statement:

```
#include<stdio.h>
int main()
{
   int num;
   printf("Enter a Number:");
   scanf("%d",&num);

   if(num>=90)
      printf("Grade is A");
   else if(num>=80  &&  num<90)
      printf("Grade is B");
   else if(num>=70  &&  num<80)
      printf("Grade is C");
   else
      printf("Fail");

 return 0;
}
```

```
#include<stdio.h>

int main()
{
   char c;
   printf("Enter a Character:");
   scanf("%c",&c);

   if(c=='A' || c=='a')
      printf("You pressed with A");
   else if(c=='B' || c=='b')
      printf("You pressed with B");
   else if(c=='C' || c=='c')
      printf("You pressed with C");
   else
      printf("You pressed a different key");
   return 0;

}
```

Nested `if else` statement:

```c
#include<stdio.h>

int main()
{
   int i;
   printf("Enter a Number:");
   scanf("%d",&i);

   if(i>0)
   {
     if(i<5)
     {
        printf("Greater than 0, less than 5");
     }
     else
     {
        printf("Greater than 5");
     }
   }

   return 0;

}
```

```c
#include<stdio.h>
int main()
{
   int i,j=3;
   printf("Enter a Number:");
   scanf("%d",&i);

   if(i>0)
   {
     if(i<j)
     {
        printf("Greater than 0, less than J");
     }
     else
     {
        printf("Greater than J");
     }
   }
   else
   {
        printf("Less than 0");
   }
   return 0;
}
```

Problems:

1. A number *x* is **positive** if it is greater than 0 and is **negative** if it is less than 0. Write a C program that takes an integer as input and tests if it is positive or negative.

Sample Output 1:

```
Enter a number: 19
19 is positive
```

Sample Output 2:

```
Enter a number: -5
-5 is negative
```

2. Write a C program that takes an integer as an input and determines whether it is a multiple of 7 or not.

Sample Output 1:

```
Enter a number: 5
5 is not a multiple of 7
```

Sample Output 2:

```
Enter a number: 49
49 is a multiple of 7
```

3. Write a program to check a number whether it's even or odd.

Sample Output 1:

```
Enter a number: 7
7 is odd
```

Sample Output 2:

```
Enter a number: 12
12 is even
```