1.

```c
#include<stdio.h>

int main() {

    int a,b;

    printf("First Number:");
    scanf("%d",&a);

    printf("Second Number:");
    scanf("%d",&b);

    if(a>b) {
        printf("%d is maximum",a);
    } else {
        printf("%d is maximum",b);
    }

 return 0;

    }
```

Input: 52
22

Output: 52 is maximum

2.

```c
#include<stdio.h>

    int main() {

        int a,b,c;

        printf("First Number:");
        scanf("%d",&a);

        printf("Second Number:");
        scanf("%d",&b);

        printf("Third number:");
        scanf("%d",&c);

        if(a>b) {
            printf("%d is maximum",a);
        } else if (b>c) {
            printf("%d is maximum",b);
        } else {
            printf("%d is maximum",c);
        }

    return 0;

    }
```

Input: 20
30
40

Output:
40 is maximum

3.
```c
#include<stdio.h>
int main()
{
    int a;
    printf("First Number :");
    scanf("%d",&a);
    if(a>0){
        printf("%d is positive",a);
    }
    else if(0>a){
        printf("%d is negative",a);
    }
    else{
        printf("%d is zero",a);
    }
    return 0;
}
```

Input: -100

Output: -100 is negative

4.

```c
#include<stdio.h>

    int main() {

        int a,b,c;

        printf("First Number:");
        scanf("%d",&a);

        if((a%5==0) && (a%13==0)) {
            printf("%d is divisible by 5 & 13",a);
        } else if (a%5==0) {
            printf("%d is divisible by only 5",a);
        } else {
            printf("%d is divisible by only 13",a);
        }

    return 0;

    }
```

Input: 85

Output:
85 is divisible by only 5

5.

```c
#include<stdio.h>
int main()
{
    int a;
    printf("First Number :");
    scanf("%d",&a);
    if(a%2==0){
        printf("%d is even number",a);
    }
    else{
        printf("%d is odd number",a);
    }
    return 0;
}
```

Input: 10

Output: 10 is even number

6.

```c
#include<stdio.h>

    int main() {

        int year;

        printf("First Number:");
        scanf("%d",&year);

        if((year%4==0) && (year%100!=0)) {
           printf("%d is a leap year",year);
        } else if (year%400==0) {
           printf("%d is a leap year",year);
        } else {
           printf("common year");
        }

    return 0;

    }
```

Input:2000

Output: 2000 is a leap year

7.

```c
#include<stdio.h>

    int main() {

        char ch;

        printf("Enter the character:");
        scanf("%c",&ch);

        if(((ch>='a') && (ch<='z')) || ((ch>='A') && (ch<='Z'))) {
           printf("Character is an Alphabet");
        } else {
           printf("Character is not an Alphabet");
        }

    return 0;

    }
```

Input: A

Output: Character is an Alphabet

8.

```c
#include<stdio.h>

    int main() {

        char ch;

        printf("Enter the character:");
        scanf("%c",&ch);

        if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u' ||
           ch=='A' || ch=='E' || ch=='I' || ch=='O' || ch=='U') {
            printf("Character is a vowel");
        } else {
            printf("Character is not a vowel");
        }

 return 0;

    }
```

Input: V

Output: Character is not a vowel

9.

```c
#include<stdio.h>

    int main() {

        char ch;

        printf("Enter the character:");
        scanf("%c",&ch);

        if(((ch>='a') && (ch>='z')) && ((ch>='A') && (ch>='Z'))) {
            printf("%c is alphabet",ch);
        } else if (ch>='a') && (ch>='z'){
            printf("%c is digit",ch);
        } else {
            printf("%c is special character",ch);
        }

    return 0;

    }
```

Input:6

Output: 6 is digit

10.

```c
#include<stdio.h>
int main()
{
    char ch;
    printf("Enter Any Character :");
    scanf("%c",&ch);

    if((ch>='A') && (ch<='Z')){
        printf("%c is uppercase alphabet",ch);
    }
    else if((ch>='a') && (ch<='z'))
    {
        printf("%c is lowercase alphabet",ch);
    }
    else{
        printf("%c is not an alphabet",ch);
    }
    return 0;
}
```

Input: B

Output: B is uppercase alphabet