

1)

```
#include <stdio.h>
```

```
int main() {
```

```
    int i;
```

```
    double number, sum = 0.0;
```

```
    for (i = 1; i <= 10; ++i) {
```

```
        printf("Enter a n%d: ", i);
```

```
        scanf("%lf", &number);
```

```
        // if the user enters a negative number, break the loop
```

```
        if (number < 0.0) {
```

```
            break;
```

```
        }
```

```
        sum += number; // sum = sum + number;
```

```
    }
```

```
    printf("Sum = %.2lf", sum);
```

```
    return 0;
```

```
}
```

Output:

Enter a n1: 2.4

Enter a n2: 4.5

Enter a n3: 3.4

Enter a n4: -3

Sum = 10.30

2)

```
#include<stdio,h>

int main()
{
    int number, i, sum=0;

    for(i=0;i<=10;i++)
    {

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

        if( number<0 ) //-ve numbers are skipped
            continue;

        sum += number; //sum = sum + number
    }

    printf("Sum=%d",sum);

    return 0;
}
```

Output:

Enter number: 50

Enter number: 40

Enter number: 20

Enter number: 60

Enter number: 30

Enter number: 40

Enter number: 20

Enter number: 10

Enter number: 40

Enter number: 50

Enter number: 60

Sum=420

3)

```
#include <stdio.h>
```

```
int main ()
```

```
{
```

```
    int a;
```

```
    while (1)
```

```
    {
```

```
        printf("enter the number:");
```

```
        scanf("%d", &a);
```

```
        if ( a == 0 )
```

```
            break;
```

```
    }
```

```
    return 0;
```

```
}
```

Output:

enter the number:5

enter the number:4

enter the number:3

enter the number:2

enter the number:1

enter the number:0

4)

```
#include <stdio.h>
```

```
int main() {
```

```
    int num = 33, flag = 0;
```

```

for(int i=2 ; i < num/2 ; i++) {
    if(num%i == 0) {
        printf("%d is not a prime number", num);
        flag = 1;
        break;
    }
}
if(flag == 0) {
    printf("%d is a prime number", num);
}
}

```

Output:

33 is not a prime number

5.

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    int i,n,sum=0;
```

```
    printf("Input number of terms : ");
```

```
    scanf("%d",&n);
```

```
    printf("\nThe odd numbers are :");
```

```
    for(i=1;i<=n;i++)
```

```
    {
```

```
        printf("%d ",2*i-1);
```

```
        sum+=2*i-1;
```

```
    }
```

```
    printf("\nThe Sum of odd Natural Number upto %d terms : %d \n",n,sum);
```

```
}
```

Output:

Input number of terms : 10

The odd numbers are :1 3 5 7 9 11 13 15 17 19

The Sum of odd Natural Number upto 10 terms : 100

6)

```
#include <stdio.h>
```

```
int main() {
```

```
    int n, i, flag = 0;
```

```
    printf("Enter a positive integer: ");
```

```
    scanf("%d", &n);
```

```
    for (i = 2; i <= n / 2; ++i) {
```

```
        // condition for non-prime
```

```
        if (n % i == 0) {
```

```
            flag = 1;
```

```
            break;
```

```
        }
```

```
    }
```

```
    if (n == 1) {
```

```
        printf("1 is neither prime nor composite.");
```

```
    }
```

```
    else {
```

```
        if (flag == 0)
```

```
            printf("%d is a prime number.", n);
```

```
        else
```

```
            printf("%d is not a prime number.", n);
```

```
    }
```

```
    return 0;
```

```
}
```

Output;

Enter a positive integer: 20

is not a prime number.

7)

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    /* Variable declaration */
```

```
    int num;
```

```
    printf("Even numbers between 1 to 100: \n");
```

```
    for(num=1; num<=100; num++)
```

```
    {
```

```
        if(num % 2 == 1)
```

```
            continue;
```

```
        printf("%d ", num);
```

```
    }
```

```
    return 0;
```

```
}
```

Output:

Even numbers between 1 to 100:

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52  
54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

8)

```
#include <stdio.h>

int main()
{
    int i=1;
    int n;
    printf("Enter the value of n: ");
    scanf("%d",&n);
    START:
    printf("%d ",i);
    i++;
    if(i<=n)
        goto START;
    return 0;
}
```

Output:

Enter the value of n: 10

1 2 3 4 5 6 7 8 9 10

9)

```
#include <stdio.h>

int main()
{
    const int maxInput = 100;
    int i;
    double number, average, sum = 0.0;
    for (i = 1; i <= maxInput; ++i) {
        printf("%d. Enter a number: ", i);
        scanf("%lf", &number);
```

```

        // go to jump if the user enters a negative number
        if (number < 0.0)
        {
            goto jump;
        }

        sum += number;
    }

jump:
    average = sum / (i - 1);
    printf("Sum = %.2f\n", sum);
    printf("Average = %.2f", average);
    return 0;
}

```

Output;

```

1. Enter a number: 20
2. Enter a number: 10
3. Enter a number: 50
4. Enter a number: 60
5. Enter a number: -20
Sum = 140.00
Average = 35.00

```

10)

```

#include <stdio.h>
#include <stdlib.h>
void main()
{
    int num;

    printf("Enter a number\n");
}

```



```
scanf("%d", &num);  
if (num % 2 == 0)  
    goto even;  
else  
    goto odd;  
even:  
    printf("%d is even\n", num);  
    exit(0);  
odd:  
    printf("%d is odd\n", num);  
}
```

Output:

Enter a number

8

is even