1. **Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, the loop terminates.**

```
#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
     break;

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

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

  return 0;
}
```

OUTPUT:

```
Enter number: 1
Enter number: 2
Enter number: 3
Enter number: 4
Enter number: 5
Enter number: 6
Enter number: -1
Sum=21
```

2. **Calculate the sum of numbers (10 numbers max) & If the user enters a negative number, it's not added to the result.**

```
#include<stdio.h>
int main(){
  int num, i, sum=0;
        for(i=0;i<=10;i++){

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

    if( num<0 )
     continue;

    sum += num;
  }

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

  return 0;
}
```

OUTPUT:

```
Enter number: 1
Enter number: 2
```

```
Enter number: 3
Enter number: 45
Enter number: -1
Enter number: 5
Enter number: -5
Enter number: 6
Enter number: 4
Enter number: 5
Enter number: 5
Sum=76
```

3. **Take input from the user until he/she enters zero. (Using Break)**

```
#include<stdio.h>
int main(){
  int num,i;
        for( ; ; ){

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

    if( num==0 )
     break;
        }

  printf("entered zero");

  return 0;
}
```

OUTPUT:

```
Enter number: 1
Enter number: 2
```

```
Enter number: 3
Enter number: 4
Enter number: 0
entered zero
```

4. Check whether the given number is prime or not.(Using Break)

```
#include <stdio.h>
int main() {
   int n, i, flag = 0;
   printf("Enter a number: ");
   scanf("%d", &n);

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

      // not 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 number: 5

5 is a prime number.

5. **Print sum of odd numbers between 0 and 10. (Using Continue)**

```
#include<stdio.h>
int main(){
  int  i, sum=0;
        for(i=0;i<10;i++){
        if(i %2==0 )
     continue;

    sum += i;
  }

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

  return 0;
}
```

OUTPUT:

Sum=25

6. **Check whether the given number is prime or not. (Using Continue)**

```
#include <stdio.h>
int main() {
    int n, i, flag = 0;
    printf("Enter a number: ");
    scanf("%d", &n);

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

```
        // not prime
        if (n % i == 0) {
            flag = 1;
            continue;
        }
    }

    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 number: 6
6 is not a prime number.
```

7. **Print all even numbers from 1 to 100. (Using Continue)**

```
#include<stdio.h>
int main(){
  int  i;
        for(i=1;i<=100;i++){
        if(i %2!=0 )
     continue;
         printf("%d\n",i);
  }
return 0;
```

}

OUTPUT:

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. Print numbers from 1 to 10 using goto statement. (Using goto)

```
#include<stdio.h>
int main(){
        int num=1;
        label:
                printf("%d\n",num);
                num++;
                if(num<=10)
                goto label;
        return 0;
}
```

OUTPUT:

1
2
3
4
5
6
7
8
9
10

9. Program to calculate the sum and average of positive numbers, If the user enters a negative number, the sum and average are displayed. (Using goto)

```
#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 label;
    }
    sum += number;
  }

label:
```

```
    average = sum / (i - 1);
    printf("Sum = %.2f\n", sum);
    printf("Average = %.2f", average);

    return 0;
}
```

OUTPUT:

```
Enter a number: 1
Enter a number: 2
Enter a number: 3
Enter a number: 4
Enter a number: 5
Enter a number: -1
Sum = 15.00
Average = 3.00
```

10. Check if a number is even or not. (Using goto)

```
#include <stdio.h>
#include<stdlib.h>
int 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);
    return 0;
}
```

OUTPUT:

```
Enter a number
9
9 is odd
```