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 i = 1,num,sum = 0;
   while(1)
    printf("Enter the number:");
     scanf("%d",&num);
      if(num < 0)
      break;
      sum += num;
      i++;
      if( i>10 )
      break;
  }
  printf("Sum is %d", sum);
  return 0;
}
OUTPUT:
Enter the number:10
Enter the number:20
Enter the number:25
Enter the number:30
Enter the number:40
Enter the number:50
Enter the number:-20
Sum is 175
```

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 i, num, sum = 0;
   for (i = 1; i <= 10; ++i) {
       printf("Enter a number: ", i);
       scanf("%d", &num);
       if (num < 0) {
           continue;
       }
       sum += num;
   printf("Sum is %d", sum);
   return 0;
}
OUTPUT:
Enter a number: 10
Enter a number: 20
Enter a number: 30
Enter a number: -25
Enter a number: 40
Enter a number: -10
Enter a number: 50
Enter a number: -15
Enter a number: 60
Enter a number: -30
Sum is 210
```

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

```
#include <stdio.h>
int main()
    int n=0, i;
    for(i=0;i<=n;i++)
    {
         printf("enter the n value:");
         scanf("%d",&n);
         if(n==0)
         break;
    return 0;
}
Out put:-
Enter the value:1
Enter the value:2
Enter the value:3
Enter the value:4
Enter the value:5
Enter the value:0
```

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

```
#include <stdio.h>
int main()
    int num,g,a;
    printf("enter number:");
    scanf("%d",&num);
    for(int a=2;a<num/2;++a){
         if( num % a==0 ){
         g=1;
         break;
         }
    }
   if(g==0)
   printf(" %d is prime number ",num);
   printf(" %d is not prime number ",num);
   return 0;
OUTPUT:
```

enter number:29 29 is prime number

```
5. print sum of odd numbers between 0 and 10. (Using Continue)
#include<stdio.h>
Int main()
Intn,I,sum;
For(i=1;i<=10;i++)
Printf("enter the value for n:");
Scanf("%d",&n);
If(n\%2==1){
Sum=sum+n;
Printf("sum:%d\n",sum);
Continue;
printf("the total sum is:%d\n",sum);
Return0;
Out put:-
Enter the value for n:1
Sum:1
Enter the value for n:2
Sum:1
Enter the value for n:3
Sum:4
Enter the value for n:4
```

## Sum:4

Enter the value for n:5

Sum:9

Enter the value for n:6 Sum:9

Enter the value for n:7 Sum:16

Enter the value for n:8 Sum:16

Enter the value for n:9 Sum:25

Enter the value for n:10 Sum:25

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

```
#include <stdio.h>
int main()
    int num,g,a;
     printf("enter number:");
    scanf("%d",&num);
    for(int a=2;a<num/2;a++){
          if( num % a!=0)
          continue;
          else
          g=1;
    }
   if(g == 0)
   printf(" %d is prime number");
   printf(" %d is not prime number");
     return 0;
}
```

## 7. print all even numbers from 1 to 100. (Using Continue)

```
#include <stdio.h>
int main()
   int num,a;
    printf("All even numbers between 1 to 100 \n");
    for(int a=1;a<=100;a++){
       if(a%2!=0)
       continue;
       printf(" %d ",a);
       if(a%26==0)
       printf("\n");
    }
    return 0;
}
OUTPUT:
All even numbers between 1 to 100
 2 4 6 8
              10
                  12
                      14
                           16
                                18
                                    20
                                         22
                                             24
                                                 26
 28
    30 32
                  36
                       38
                           40
                                42
                                    44
                                             48
                                                 50
                                                      52
              34
                                        46
 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 count=1;
    int n;
    printf("Enter the value of n: ");
    scanf("%d",&n);
    start:
    printf("%d ",count);
    count++;
    if(count<=n)
        goto start;
    return 0;
OUTPUT:
Enter the value of n: 10
12345678910
```

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 max = 100;
      int i, number, avg, sum = 0;
       for (i = 1; i <= max; ++i) {
       printf("Enter a number: ", i);
       scanf("%d", &number);
       if (number < 0) {
          goto jump;
       sum += number;
   jump:
   avg = sum / (i - 1);
   printf("Sum = %d\n", sum);
   printf("Avg = %d", avg);
   return 0;
}
OUTPUT:
Enter a number: 10
Enter a number: 20
```

Enter a number: 30 Enter a number: -20 Sum = 60

Avg = 20

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

```
#include <stdio.h>
int main()
{ int num;
    printf("enter the number :");
    scanf("%d",&num);
    if(num%2==0)
    goto even;
    else goto odd;
    printf(" %d is a even number",num);
    return 0;
    odd:
    printf(" %d is not a even number",num);
 }
OUTPUT:
enter the number :24
24 is a even number
```