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:12
Enter the number:20
Enter the number:25
Enter the number:30
Enter the number:40
Enter the number:36
Enter the number:45
Enter the number:-37
Sum is 218
```

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:12
Enter a number:15
Enter a number:-21
Enter a number:25
Enter a number:27
Enter a number:30
Enter a number:-34
Enter a number:-32
Enter a number:35
Sum is 154.
```

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 value:");
        scanf("%d",&n);
          if(n==0)
              break;
    }
    return 0;
}
```

OUTPUT:

```
Enter the value:2
Enter the value:3
Enter the value:4
Enter the value:6
Enter the value:7
Enter the value:0
```

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

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

```
        printf("Enter a number:");
        scanf("%d",&num);
        for(int a=2;a<num/2;++a)
        {
                if( num % a==0 )
                {
                b=1;
                break;
                }
        }
      if(b==0)
      printf(" %d is prime number ",num);
      else
      printf(" %d is not prime number ",num);
      return 0;
}
```

OUTPUT:

```
Enter a number:23
23 is a prime number.
```

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

```
#include <stdio.h>
int main()
{
        int n, 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);
        }
  return 0;
}
```

OUTPUT:

```
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 n, i, temp= 0;
```

```
    printf("Enter a number: ");
    scanf("%d", &n);
    for (i = 2; i <= n / 2; ++i)
    {
        if (n % i == 0)
         {
            temp= 1;
            continue;
        }
    }

    if (n == 1)
    {
        printf("1 is neither prime nor composite");
    }
    else
    {
        if (temp == 0)
            printf("%d is a prime number ", n);
        else
            printf("%d is not a prime number ", n);
    }

    return 0;
}
```

OUTPUT:

```
Enter a number:23
 23 is a prime number.
```

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 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 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:15
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

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:12
Enter a number:14
Enter a number:16
Enter a number:-18
Sum=42
Avg=14
```

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;

      even:
      printf(" %d is a even number",num);
      return 0;
      odd:
      printf(" %d is not a even number",num);
  }
```
OUTPUT:
```
Enter the number:27
27 is not an even number.
```