

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,n,sum=0;

    for(i=0;i<=10;i++)
    {
        printf("enter the number: ");
        scanf("%d",&n);

        if( n<0 )
            break;

        sum = sum + n;
    }

    printf("the sum is %d",sum);

    return 0;
}
```

Output:-

enter the number: 5

enter the number: 5

enter the number: 5

enter the number: 5

enter the number: -5

the sum is 20

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,n,sum=0;

    for(i=0;i<=10;i++)
    {
        printf("enter the number: ");
        scanf("%d",&n);

        if( n<0 )
            continue;

        sum = sum + n;
    }

    printf("the sum is %d",sum);

    return 0;
}
```

Output:-

```
enter the number: 5
enter the number: 5
enter the number: 5
enter the number: 5
enter the number: -2
enter the number: -2
enter the number: 5
enter the number: 5
enter the number: -3
enter the number: -3
enter the number: 5
the sum is 35
```

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

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

    while(1)
    {
        printf("enter a number:");
        scanf("%d",&num);
        if( num==0 )
        {
            break;
        }
    }
    printf("you have entered zero %d",num);

    return 0;
}
```

Output:-

enter a number:6

enter a number:9

enter a number:4

enter a number:5

enter a number:1

enter a number:3

enter a number:65

enter a number:2

enter a number:0

you have entered zero 0

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

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

    for(i=2;i<n;i++)
    {
        if(n%i==0)
        {
            num++;
            break;
        }
    }
    if(num==0)
    {
        printf("the number is a prime number:%d",n);
    }

    else
    {
        printf("the number is not a prime number:",n);
    }

    return 0;
}
```

Output:-

enter an number:6

the number is not a prime number:

enter an number:3

the number is a prime number:3

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

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

    for(i=0; i<=10; i++)
    {
        if(i%2==0)
        {
            continue;
        }
        sum=sum+i;
    }
    printf("sum of all odd numbers are:%d",sum);

    return 0;
}
```

Output:-

Enter an number: 10

sum of all odd numbers are:25

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

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

    for(i=2;i<n;i++)
    {
        if(n%i==0)
        {
            num++;
            continue;
        }
    }
    if(num==0)
    {
        printf("the number is a prime number:%d",n);
    }

    else
    {
        printf("the number is not a prime number:",n);
    }

    return 0;
}
```

Output:-

enter an number:5

the number is a prime number:5

enter an number:9

the number is not a prime number:

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

```
#include <stdio.h>
int main()
{
    int i;
    printf("even numbers till 100 are: ");

    for(i=1; i<=100; i++)
    {
        if(i%2 == 0)
        {
            printf("%d\t", i);
            continue;
        }
    }

    return 0;
}
```

Output:-

even numbers till 100 are:	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 i=1,n=10;
    printf("the numbers are: ");

    number:
    printf("%d ",i);
    i++;

    if(i<=n)
        goto number;

    return 0;
}
```

Output:-

the numbers are: 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()
{
    int i,number=10,average,sum=0;

    for(i=1;i<=number;i++)
    {
        printf(" enter a number:");
        scanf("%d",&number);

        if(number<0)
        {
            goto label;
        }
        sum=sum+number;
    }
    label:
    average=sum/(i-1);
    printf("sum=%d\n",sum);
    printf("average=%d",average);

    return 0;
}
```

Output:-

enter a number:5

enter a number:5

enter a number:5

enter a number:-5

sum=15

average=5

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

```
#include<stdio.h>
int main()
{
    int n;
    char ch;
    start:
        printf("Enter a number:");
        scanf("%d",&n);

        if(n%2==0)
        {
            printf("%d is even no",n);
        }
        else
        {
            printf("%d is odd no",n);
            scanf("%c",&ch);
        }
        if(ch=='n' || ch=='N')
            goto start;
    return 0;
}
```

Output:-

Enter a number:5

5 is odd no

Enter a number:4

4 is even no