

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 num,sum=0,i=1;
    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:29

Enter the number:34

Enter the number:65

Enter the number:12
```

```
Enter the number:45
```

```
Enter the number:30
```

```
Enter the number:25
```

```
Enter the number:17
```

```
Enter the number:48
```

```
Enter the number:90
```

```
Sum is 395
```

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 the number:");
```

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

```
        if(num<0){
```

```
            continue;
```

```
        }
```

```
        sum += num;
```

```
    }
```

```
    printf("Sum is %d",sum);
```

```
    return 0;
```

```
}
```

Output:

```
Enter the number:43
Enter the number:67
Enter the number:-
56
Enter the number:23
Enter the number:-
90
Enter the number:45
Enter the number:65
Enter the number:-
73
Enter the number:45
Enter the number:88
Sum is 376
```

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;
}
```

Output:

Enter the n value:4

Enter the n value:7

Enter the n value:5

Enter the n value:8

Enter the n value:0

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

```
#include <stdio.h>

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

Output:

Enter the number:35

35 is not a prime number

5.print sum of odd numbers between 0 to 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",sum);
    }
    return 0;
}
```

Output:

Enter the value for n:1

Sum:1

Enter the value for n:2

The total sum is :1Enter the value for n:3

Sum:4

Enter the value for n:4

The total sum is :4Enter the value for n:5

Sum:9

Enter the value for n:6

The total sum is :9Enter the value for n:7

Sum:16

Enter the value for n:8

The total sum is :16Enter the value for n:9

Sum:25

Enter the value for n:10

The total sum is :25

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

```
#include <stdio.h>

int main()
{
    int num,p,s, temp=0;
    printf("Enter the number:");
    scanf("%d",&num);
    for(int p=2;p<num/2;++s){
        if(num%p!=0){
            temp= 1;
            continue;
        }
    }
    if(s==1){
        printf("1 is neither prime nor composite");
    }
    else
    {
        if(temp==0)
            printf("%d is a prime number",num);
    }
}
```

```
    else
    printf("%d is not a prime number",num);
}
return 0;
}
```

Output:

Enter the number :29

29 is a prime number

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

```
#include <stdio.h>
int main()
{
    int num,e;
    printf("All even numbers between 1 to 100 \n");
    for(int e=1;e<=100;e++){
        if(e%2!=0)
            continue;
        printf(" %d ",e);
        if(e%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 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:10

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 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:30

Enter a number:20

Enter a number:50

Enter a number:-45

Sum = 100

Avg = 33

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

```
#include <stdio.h>

int main()
{
    int num;

    printf("Enter a 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 a number:37

37 is not a even number