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;
}
```

OUTPUT:

```
Enter the n value:1
Enter the n value:2
Enter the n value:3
Enter the n 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);
      else
      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() {
	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
The total sum is:1
Enter the value for n:3
Sum:4
Enter the value for n:4
The total sum is:4
Enter the value for n:5
Sum:9
Enter the value for n:6
The total sum is:9
Enter the value for n:7
Sum:16
Enter the value for n:8
The total sum is:16
Enter 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 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: 24
24 is not 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   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: 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;

       even:
       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
```