

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 number, i, sum=0;

    for(i=1;i<=10;i++)

    {

        printf("Enter number: ");

        scanf("%d",&number);

        if( number<0 )

            break;

        sum += number;


    }

    printf("Sum=%d",sum);

    return 0;

}
```

Output:

 C:\Users\DELL\Documents\aka\sum1.exe

```
Enter number: 3
Enter number: 5
Enter number: 7
Enter number: 9
Enter number: 7
Enter number: -3
Sum=31
```

```
-----
Process exited after 10.56 seconds with return value 0
Press any key to continue . . .
```

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>

void main()

{

    int number, i, sum=0;

    for(i=0;i<=10;i++)

    {

        printf("Enter number: ");

        scanf("%d",&number);

        if( number<0 )

            continue;

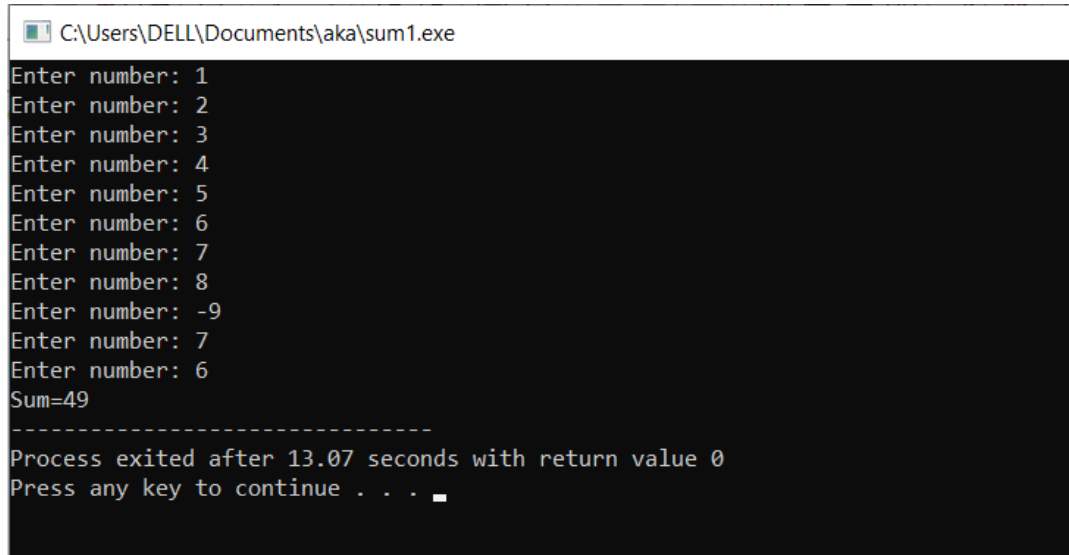
        sum += number;

    }

    printf("Sum=%d",sum)

}
```

Output:



```
C:\Users\DELL\Documents\aka\sum1.exe
Enter number: 1
Enter number: 2
Enter number: 3
Enter number: 4
Enter number: 5
Enter number: 6
Enter number: 7
Enter number: 8
Enter number: -9
Enter number: 7
Enter number: 6
Sum=49
-----
Process exited after 13.07 seconds with return value 0
Press any key to continue . . .
```

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

```
#include <stdio.h>

int main()
{
    int number;

    while(1)
    {
        printf("Enter integer number: ");

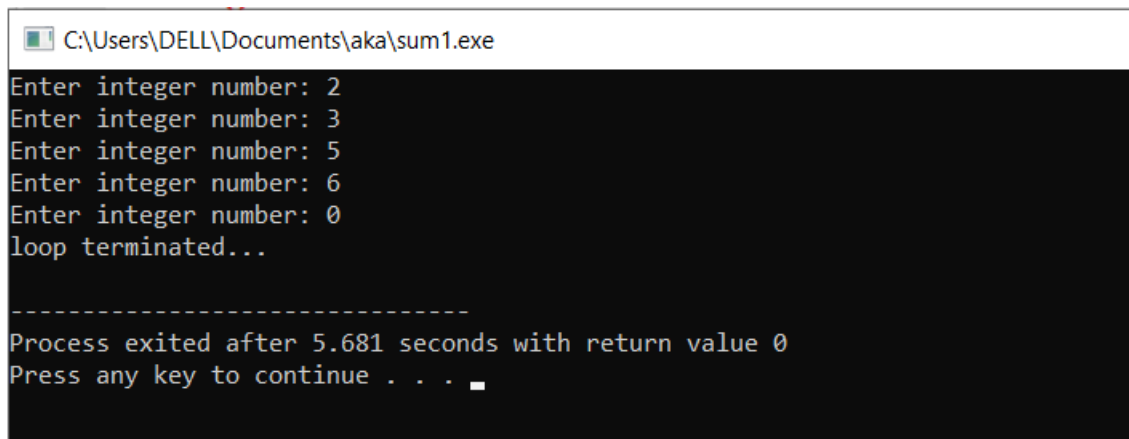
        scanf("%d",&number);

        if( number==0)
        {
            printf("loop terminated...\n");

            break;
        }
    }

    return 0;
}
```

Output:



```
C:\Users\DELL\Documents\aka\sum1.exe
Enter integer number: 2
Enter integer number: 3
Enter integer number: 5
Enter integer number: 6
Enter integer number: 0
loop terminated...

-----
Process exited after 5.681 seconds with return value 0
Press any key to continue . . .
```

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

```
#include <stdio.h>

int main() {

    int n, i, flag = 0;

    printf("Enter a positive integer: ");

    scanf("%d", &n);

    for (i = 2; i <= n / 2; ++i) {

        if (n % i == 0) {

            flag = 1;

            break;

        }

    }

    if (n == 1) {

        printf("1 is neither prime nor composite.");

    }

    else {

        if (flag == 0)

            printf("%d is a prime number.", n);

        else

            printf("%d is not a prime number.", n);

    }

    return 0;

}
```

Output:

```
C:\Users\DELL\Documents\aka\sum1.exe
Enter a positive integer: 101
101 is a prime number.
-----
Process exited after 2.641 seconds with return value 0
Press any key to continue . . .
```

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

```
#include <stdio.h>

int main()
{
    int i,sum=0;
    for(i=1; i<=10; i+=2)
    {
        sum += i;
        continue;
    }
    printf("Sum of odd numbers = %d", sum);
    return 0;
}
```

Output:

```
C:\Users\DELL\Documents\aka\sum1.exe
Sum of odd numbers = 25
-----
Process exited after 0.04879 seconds with return value 0
Press any key to continue . . .
```

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

```
#include <stdio.h>

int main() {

    int n, i, flag = 0;

    printf("Enter a positive integer: ");

    scanf("%d", &n);

    for (i = 2; i <= n / 2; ++i) {

        if (n % i == 0) {

            flag = 1;

            continue;

        }

    }

    if (n == 1) {

        printf("1 is neither prime nor composite.");

    }

    else {

        if (flag == 0)

            printf("%d is a prime number.", n);

        else

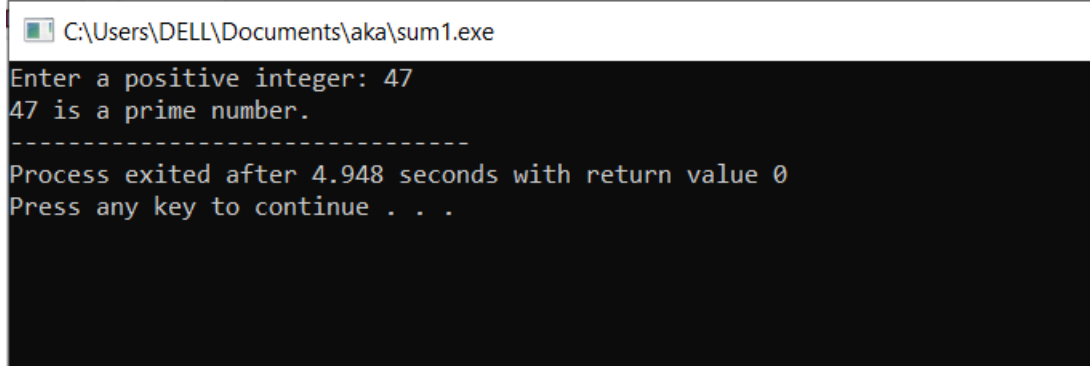
            printf("%d is not a prime number.", n);

    }

    return 0;

}
```

Output:



```
C:\Users\DELL\Documents\aka\sum1.exe
Enter a positive integer: 47
47 is a prime number.
-----
Process exited after 4.948 seconds with return value 0
Press any key to continue . . .
```

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

```
#include <stdio.h>

int main() {

    int counter;

    printf("Even numbers between 1 to 100\n");

    for(counter = 1; counter <= 100; counter++) {

        if(counter%2 == 0) {

            printf("%d ", counter);

            continue;

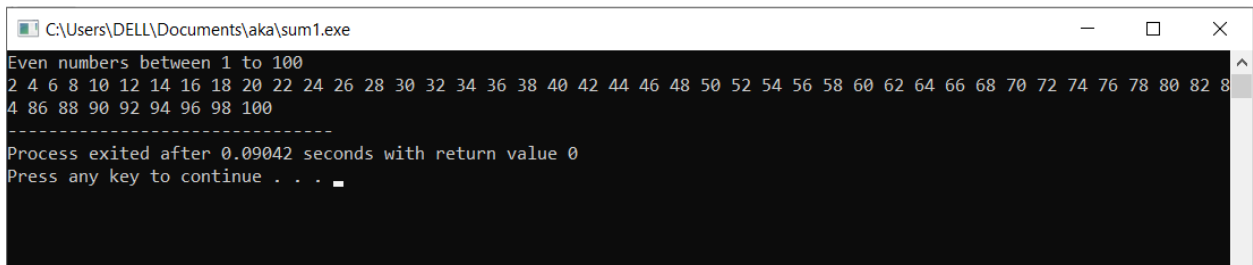
        }

    }

    return 0;

}
```

Output:



```
C:\Users\DELL\Documents\aka\sum1.exe
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
-----
Process exited after 0.09042 seconds with return value 0
Press any key to continue . . .
```

8. print numbers from 1 to 10 using goto statement. (Using goto)

```
#include <stdio.h>

int main()
{
    int counter=1;

    int n=10;

    START:

    printf("%d ",counter);

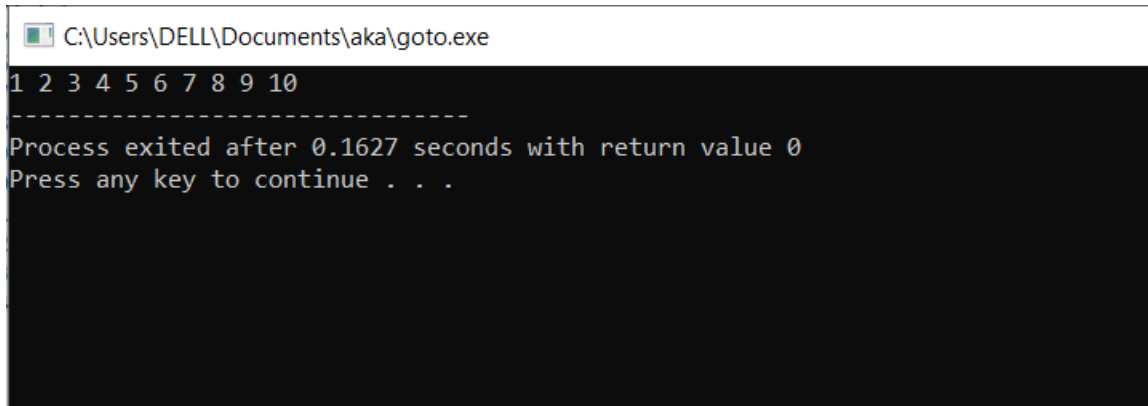
    counter++;

    if(counter<=10)

        goto START;

    return 0;
}
```

Output:

A screenshot of a Windows command prompt window. The title bar shows the file path "C:\Users\DELL\Documents\aka\goto.exe". The command prompt displays the output of the program: the numbers 1 through 10 are printed on a single line, followed by a dashed line separator. Below the separator, it says "Process exited after 0.1627 seconds with return value 0" and "Press any key to continue . . .".

```
C:\Users\DELL\Documents\aka\goto.exe
1 2 3 4 5 6 7 8 9 10
-----
Process exited after 0.1627 seconds with return value 0
Press any key to continue . . .
```

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>

void main()
{
```



```
const int max=50;

int i,number,avg,sum=0;

    for(i=1;i<=max;++i)
    {
        printf("Enter a number\n");
        scanf("%d", &number);
        if (number<0)
        {
            goto START;
        }
        sum+=number;
    }

START:

        avg=sum/(i-1);

        printf("sum=%d\n", sum);

        printf("avg=%d\n", avg);

        return 0;

    }
```

Output:

```
C:\Users\DELL\Documents\aka\goto2.exe
Enter a number
5
Enter a number
6
Enter a number
7
Enter a number
8
Enter a number
9
Enter a number
-3
sum=35
avg=7

-----
Process exited after 7.076 seconds with return value 6
Press any key to continue . . .
```

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

```
#include <stdio.h>

void main(){

    int num;

    printf("Enter a number\n");

    scanf("%d", &num);

    if (num % 2 == 0)

        goto even;

    else

        goto odd;

even:

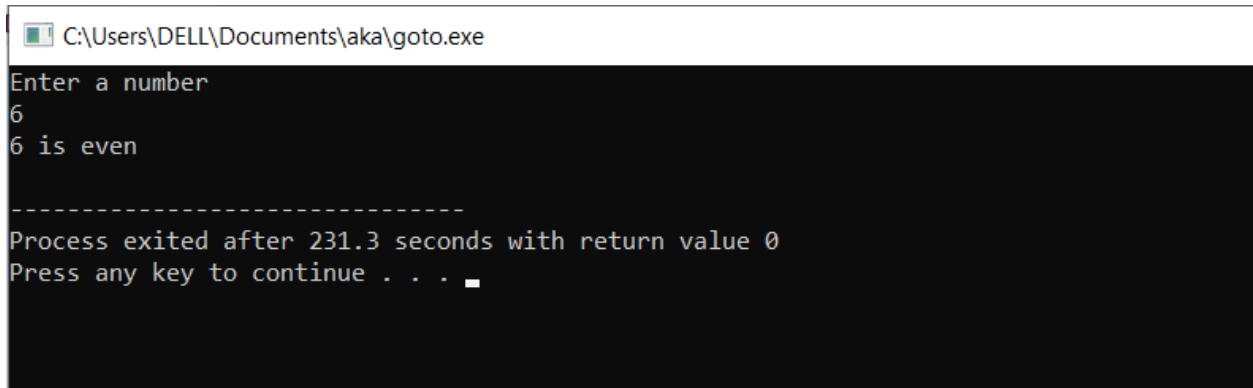
    printf("%d is even\n", num);

    exit(0);

odd:
```

```
    printf("%d is odd\n", num);  
}
```

Output:



```
C:\Users\DELL\Documents\aka\goto.exe  
Enter a number  
6  
6 is even  
  
-----  
Process exited after 231.3 seconds with return value 0  
Press any key to continue . . .
```