

**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