

WAP to ask the user to input numbers continuously and as soon as the user inputs 0 , display the sum of all the numbers inputted before 0

Input numbers and press 0 to stop:

10 ✓
5 ✓
7 ✓
11 ✓
0 ✓

Sum is 33

```

int main()
{
    int n, sum=0;

    printf("Input numbers and press 0 to stop:");

    for(;;)
    {
        scanf("%d", &n);
        if(n == 0)
            break;
        sum = sum + n;
    }
    printf("Sum is %d", sum);
    return 0;
}

```

Handwritten annotations:
 Above the code, there are two boxes. The first box contains '11' above '57' with 'n' below it. The second box contains '15 22 33' above '07' with 'sum' below it.

Modify the previous code so that if the user inputs negative nos then your program ignores them

7
5
-4
11
9
-7
0

```

int main()
{
    int n, sum=0;

    printf("Enter nos and press 0 to stop:");

    for(;;)
    {
        scanf("%d", &n);
        if(n == 0)
            break;
        else if(n < 0)
            continue;
        sum = sum + n;
    }
    printf("Sum is %d", sum);
    return 0;
}

```

Handwritten annotations:
 Above the code, there are two boxes. The first box contains '750' above 'n'. The second box contains '12 23 32' above '07' with 'sum' below it.

Various Forms of for Loop

```
for ( init 1, init 2, .... ; test 1 lop test 2 ; stmt 1, stmt 2, -- )
{
    //
}
    
```

↑
logical op

o/p

1	10✓
2	9✓
⋮	⋮
⋮	⋮
10	1

Test Case
Checked : 21

```
int main()
{
    int i, j;

    for (i = 1, j = 10; i <= 10 && j >= 1; i++, j--)
        printf("\n %d %d", i, j);

    return 0;
}
    
```

O/p

1	10
2	9
3	8
4	7
5	6
6	5

Test Case
Checked : 14

```

int main()
{
    int i, j;

    for (i = 1, j = 10; i <= 10 && j >= 5; i++, j--)
        printf("%d . %d . %d", i, j);

    return 0;
}

```

O/p

1	10
:	:
:	:
:	:
10	1

Test Case
Checked : 12

```

int main()
{
    int i, j;

    for (i = 1, j = 10; i <= 10 && j >= 5; i++, j--)
        printf("%d . %d . %d", i, j);

    return 0;
}

```

o/p
11

```
int main()
{
    int i;

    for (i = 1; i <= 10; i++) {
        printf("%d", i);
    }

    return 0;
}
```

Our Code

```
for (i = 1; i <= 10; i++) {
    printf("%d", i);
}
```

Compiler's Code

```
for (i = 1; i <= 10; i++) {
    printf("%d", i);
}
```

```

int main()
{
    int n=5;

    if(n%2==0)
    {
        printf("%d is even no", n);
    }
    else
    {
        printf("%d is odd no", n);
    }
    return 0;
}

```

WAP to accept an integer from the user and check whether it is a PRIME NUMBER or not. Assume that the user will input POSITIVE numbers greater than 1 only.

n $=$ $\neq 2, 3, \dots, n-1$ $\cdot /$	$n = 9$ $i = 2, 3, \dots, 8$ $1, 0$ $n = 7$ $i = 2, 3, 4, 5, 6$ $1, 1, 3, 2, 1$
--	--

```

int main()
{
    int i, n;
    printf("Enter an int:");
    scanf("%d", &n);

```

n=2

i=2

n=9

i=2 3

n=7

i=2 3

4 5

6 7

```

{
    for (i = 2; i <= n - 1; i++)
    {

```

```

        if (n % i == 0)
        {

```

```

            printf("Not prime");

```

```

            break;
        }
    }
    if (i == n)
    {
        printf("No is prime");
        return 0;
    }
}

```