

```

int main()
{
    int n, i;

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

    i = n;
    while(i >= 1)
    {
        printf("%d ", i);
        i = i - 1;
    }
    printf("\n");
    return 0;
}

```

$\approx 10$   

543
i

5
n

5
4
3
2
1

Using only 1 var

```

int main()
{
    int n;

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

    while(n >= 1)
    {
        printf("%d ", n);
        n = n - 1;
    }
    printf("\n");
    return 0;
}

```

5
n

5
4
3
2
1

WAP to print all the EVEN NUMBERS from 1 to 20

Solution 1:

=====

```
int main()
{
    int i;

    i=1;

    while(i<=20)
    {
        if(i%2==0)
            printf("\n%d",i);
        i=i+1;
    }
    return 0;
}
```

~~1~~ 2 3 4 5



Solution 2:

=====

```
int main()
{
    int i;

    i=2;

    while(i<=20)
    {
        printf("\n%d",i);
        i=i+2;
    }
    return 0;
}
```

2 4 6 8



WAP to accept an integer from the user and print the SUM of all the numbers from 1 to that number. Assume that the input given will be POSITIVE only.

SAMPLE OUTPUT:

=====

Enter an int: 5  
Sum is 15

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

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

    i=1;
    while(i<=n)
    {
        sum = sum + i;
        i = i + 1;
    }
    printf("Sum is %d", sum);
    return 0;
}
```

6 7 15  
2 3 4 5 1 3 6  
+ 5 6  
i n sum  
a) sum = 0 + 1 => 1  
b) sum = 1 + 2 => 3  
c) sum = 3 + 3 => 6  
d) sum = 6 + 4 => 10  
e) sum = 10 + 5 => 15

```

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

    [ printf ("Enter an int: ");
      scanf ("%d", &n);

      while (n >= 1)
      {
          sum = sum + n;
          n = n - 1;
      }

    printf ("Sum is %d", sum);
    return 0;
}

```

$\begin{matrix} 1 & 0 \\ 4 & 3 & 2 \end{matrix}$   
 $n = 5$        $sum = 0$

---

a)  $sum = 0 + 5 \Rightarrow 5$   
 b)  $sum = 5 + 4 \Rightarrow 9$   
 c)  $sum = 9 + 3 \Rightarrow 12$   
 d)  $sum = 12 + 2 \Rightarrow 14$   
 e)  $sum = 14 + 1 \Rightarrow 15$

#### SAMPLE OUTPUT

=====

Enter an int: 5

1  
2  
3  
4  
5

#### SAMPLE OUTPUT

=====

Enter an int: -4

-4  
-3  
-2  
-1