
```
public class Loop
{

	public static void main(String[] args)
	{
// Can a for loop execute without initialization?-->Yes It can.

System.out.println("for loop execute without initialization\n");
		int i=1;//initialization it before the for statement

		for(;i<=10;i++)
		{
			System.out.println("i is:"+i);
		}

		System.out.println("\n-----------------------------\n");

		//Can a for loop be executed without increment/decrement
operator?
		System.out.println("for loop be executed without
increment/decrement operator\n");
		int j;
		for(j=10;j>=1;)//Yes It Can.
		{

			System.out.println("j is:"+j);
			j--;//9

		}

// Can a for loop be Executed without both initialization and
increment/decrement operator?


System.out.println("\n-----------------------------------\n");
```


```
System.out.println("Can a for loop be Executed without both
initialization and increment/decrement operator\n");

      int k=10;//      initialization

for( ;k>=1;  )//condition
{

      System.out.println("k is:"+k);

      k--;//increment
}

System.out.println("\n----------------------------------------\n");

// Check if the number is Even or Odd?

System.out.println("\nEven OR Odd\n");
int num=23;

if(num%2==0)//23%2 remainder is 1-->False
{

      System.out.println(num+" is an Even Number");
}
else
{
      System.out.println(num+" is an Odd Number");
}

System.out.println("\n-------------------------\n");


int num2=20;

if(num2%2==0)// 20%2 remainder is 0-->True
{

      System.out.println(num2+" is an Even Number");
}
else
{
      System.out.println(num2+" is an Odd Number");
}
```

```
System.out.println("\n---------------------------------------\n");


// Display The Even Numbers between 1 to 20

System.out.println(" Display The Even Numbers between 1 to 20\n");


int p;


for(p=1;p<=20;p++)
{
      if(p%2==0)//rem=0→True  rem not 0→False
      {
            System.out.println("Even: "+p);
      }


}

System.out.println("\n----------------------------\n");

System.out.println(" Display The Odd Numbers between 1 to 20\n");

int q;

for(q=1;q<=20;q++)
{
      if(q%2!=0)
      {
            System.out.println(q+" is Odd");

      }

}

System.out.println("\n-------------------------\n");
```


```
System.out.println("Display a to z alphabets\n");

char ch;

for(ch='a';ch<='z';ch++)
{
      System.out.print(" "+ch);

}
System.out.println("\n-------------------------\n");

System.out.println("Diplay All Vowels from a to z\n");


char ch2;

for(ch2='a';ch2<='z';ch2++)
{
      if(ch2=='a'||ch2=='e'||ch2=='i'||ch2=='o'||ch2=='u')
      {
            System.out.println(ch2+" is a vowel");
      }


}
```

OutPut:

for loop execute without initialization

```
i is:1
i is:2
i is:3
i is:4
i is:5
i is:6
i is:7
i is:8
i is:9
i is:10
```


```
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for loop be executed without increment/decrement operator

j is:10
j is:9
j is:8
j is:7
j is:6
j is:5
j is:4
j is:3
j is:2
j is:1

-----------------------------------

Can a for loop be Executed without both initialization and
increment/decrement operator

k is:10
k is:9
k is:8
k is:7
k is:6
k is:5
k is:4
k is:3
k is:2
k is:1

-----------------------------------------


Even OR Odd

23 is an Odd Number
```


```
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20 is an Even Number

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 Display The Even Numbers between 1 to 20

Even: 4
Even: 6
Even: 8
Even: 10
Even: 12
Even: 14
Even: 16
Even: 18
Even: 20

-----------------------------

 Display The Odd Numbers between 1 to 20

1 is Odd
3 is Odd
5 is Odd
7 is Odd
9 is Odd
11 is Odd
13 is Odd
15 is Odd
17 is Odd
19 is Odd

-------------------------

Display a to z alphabets
```


```
 a b c d e f g h i j k l m n o p q r s t u v w x y z
--------------------------

Display All Vowels from a to z

a is a vowel
e is a vowel
i is a vowel
o is a vowel
u is a vowel
```