

For each loop syntax :

=====

```
for(data_type item : collection/array){  
    ...  
}
```

1. collection is a collection or array variable that you have to loop through.
2. item is a single item from the collection.

Example: 1

```
String[] arrData = {"Alpha", "Beta", "Gamma", "Delta", "Sigma"};  
for (String strTemp : arrData){  
    System.out.println(strTemp);  
}
```

```
for(int i = 0; i< arrData.length; i++){  
    System.out.println(arrData[i]);  
}
```

output: Alpha
Beta
Gamma
Delta
Sigma

Example: 2

```
1. int[] numArray = {10, 20, 30, 40};  
   for(int num : numArray){  
       System.out.println(num);  
   }
```

```
2. public static void main(String[] args) {  
    List<Integer> numList = new ArrayList<Integer>();  
    numList.add(10);  
    numList.add(20);  
    numList.add(30);  
    numList.add(40);  
    //foreach loop  
    for(int num : numList) {  
        System.out.println(num);  
    }  
}
```

```
3. public static void main(String[] args) {
    List<Integer> numList = new ArrayList<Integer>();
    numList.add(10);
    numList.add(20);
    numList.add(30);
    numList.add(40);

    //foreach loop with lambda
    numList.forEach( item -> System.out.println(item) );
    //Pass function reference
    numList.forEach( System.out::println );
}
```

```
output : 10
        20
        30
        40
```

Example : 3

```
class AssignmentOperator {
    public static void main(String[] args) {
        char[] vowels = {'a', 'e', 'i', 'o', 'u'};
        // foreach loop
        for (char item: vowels) {
            System.out.println(item);
        }
    }
}

-----

class ForLoop {
    public static void main(String[] args) {
        char[] vowels = {'a', 'e', 'i', 'o', 'u'};
        for (int i = 0; i < vowels.length; ++ i){
            System.out.println(vowels[i]);
        }
    }
}
```

```
output : a
        e
        i
        o
        u
```