

Java forEach loop

Java provides a new method `forEach()` to iterate the elements. It is defined in `Iterable` and `Stream` interface. It is a default method defined in the `Iterable` interface. Collection classes which extends `Iterable` interface can use `forEach` loop to iterate elements.

This method takes a single parameter which is a functional interface. So, you can pass lambda expression as an argument.

forEach() Signature in Iterable Interface

```
default void forEach(Consumer<super T> action)
```

Java 8 forEach() example 1

```
import java.util.ArrayList;
import java.util.List;
public class ForEachExample {
    public static void main(String[] args) {
        List<String> gamesList = new ArrayList<String>();
        gamesList.add("Football");
        gamesList.add("Cricket");
        gamesList.add("Chess");
        gamesList.add("Hockey");
        System.out.println("-----Iterating by passing lambda expression-----");
        gamesList.forEach(games -> System.out.println(games));
```

```
}  
}
```

Output:

```
-----Iterating by passing lambda expression-----  
Football  
Cricket  
Chess  
Hockey
```

Java 8 forEach() example 2

```
import java.util.ArrayList;  
import java.util.List;  
public class ForEachExample {  
    public static void main(String[] args) {  
        List<String> gamesList = new ArrayList<String>();  
        gamesList.add("Football");  
        gamesList.add("Cricket");  
        gamesList.add("Chess");  
        gamesList.add("Hockey");  
        System.out.println("-----Iterating by passing method reference-----");  
        gamesList.forEach(System.out::println);  
    }  
}
```

```
}
```

Output:

```
-----Iterating by passing method reference-----  
Football  
Cricket  
Chess  
Hocky
```

Java Stream forEachOrdered() Method

Along with `forEach()` method, Java provides one more method `forEachOrdered()`. It is used to iterate elements in the order specified by the stream.

Singnature:

```
void forEachOrdered(Consumer<? super T> action)
```

Java Stream forEachOrdered() Method Example

```
import java.util.ArrayList;  
import java.util.List;  
public class ForEachOrderedExample {  
    public static void main(String[] args) {  
        List<String> gamesList = new ArrayList<String>();
```

```
gamesList.add("Football");
gamesList.add("Cricket");
gamesList.add("Chess");
gamesList.add("Hockey");
System.out.println("-----Iterating by passing lambda expression-----");
gamesList.stream().forEachOrdered(games -> System.out.println(games));
System.out.println("-----Iterating by passing method reference-----");
gamesList.stream().forEachOrdered(System.out::println);
}
}
```

Output:

```
-----Iterating by passing lambda expression-----
Football
Cricket
Chess
Hockey
-----Iterating by passing method reference-----
Football
Cricket
Chess
Hockey
```