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

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

Java 8 forEach() example 1

```java
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("Hocky");
        System.out.println("------------Iterating by passing lambda expression--------------");
        gamesList.forEach(games -> System.out.println(games));

    }
}
```

Output:

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

Java 8 forEach() example 2

```java
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("Hocky");
        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:

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

Java Stream forEachOrdered() Method Example

```java
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("Hocky");
        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
Hocky
------------Iterating by passing method reference---------------
Football
Cricket
Chess
Hocky
```