

foreach-loops

Learn how to use foreach-loops to loop over list-like structures.

Python for-loops loop over sequences; a list is one type of sequence. This can be very convenient, and Java 8 introduced a similar capability, called a foreach-loop. In spite of the name, a foreach-loop uses the keyword `for`. Here is an example:

```
class ForEachExample {  
    public static void main(String[] args) {  
        int[] primes = {2, 3, 5, 7, 11, 13};  
        for(int p: primes) {  
            System.out.println(p);  
        }  
    }  
}
```



The instruction before the colon creates a variable. That variable then takes on every value in the **collection** after the colon. An array is a particular type of collection; so are ArrayLists and other data structures that we will see later.

Only the value of an array item is copied into `p` above; changing `p` does not change the array.

Java 8 also introduced a method `.forEach()` of collections. It is quite nice, but since we have not discussed collections in detail, we will leave `.forEach()` for another day.