

# Java Arrays Part 2 Notes

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## 1 Enhanced For Loop

- **Syntax:** *for (DATA\_TYPE ITER\_VAR : ARR\_VAR) {...}*
  - : Means ‘in’, like python

### Example:

```
1 String[] classmates = {"Ben", "Johnny", "Pasan"};
2 for (String classmate : classmates) {
3     System.out.printf("%s is my class friend\n", classmate);
4 }
5
```

Listing 1: lesson\_01/Explore.java

### Notes:

- Files can be compiled and displayed by typing *javac Explore.java* && *java Explore* in terminal

## 2 Quiz 1

1. The reason you can use an array in an enhanced for loop is because
  - A. arrays are special. They are the only type of object you can use in an enhanced for loop.
  - B. they are contiguous.
  - C. arrays are iterable. Any object that is considered iterable can be used.

**Answer: C**

2. The code below can be read as:

```
1 String[] flavors = {"vanilla", "chocolate", "strawberry"};
2 for (String flavor : flavors) {
3     // ...
4 }
5
```

- A. For each flavor in the flavors array...
- B. Flavors should be reduced to a single value
- C. Once flavor is set, concatenate ...

**Answer: A**

## 3 Ye Olde Unenhanced For Loop

- **Syntax:** *for (int i = 0; i < ARR\_VAR.length; i++) ...*

```
1 String[] classmates = {"Ben", "Johnny", "Pasan"};
2 for (int i = 0; i < classmates.length; i++) {
3     String classmate = classmates[i];
4     System.out.printf("%s is my class friend", classmate);
5 }
6
```

Listing 2: lesson\_03/Explore.java

## 4 Exercise 1

- Solution included in *exercise\_1.java*

## 5 Multidimensional Arrays

- **Syntax:** *DATA\_TYPE*[[[]] *ARR\_VAR* = ..., ..., ..., ...

```
1  import java.util.Arrays;
2
3  public class Explore {
4      public static void main(String[] args) {
5          int [][] scoreBoards = {
6              {1,2,4,2,6,5,4},
7              {2,3,5,1,1,2,3},
8              {4,4,2,1,2,2,1}
9          };
10         System.out.println(Arrays.toString(scoreBoards [0]));
11         System.out.println(scoreBoards [1] [2]);
12     }
13 }
14
```

Listing 3: lesson\_05/Explore.java