

Arrays in Focus: Creating, Initialising and Iterating

- arrays (in Java) are objects too...

```
public class RobotArrays {  
    public static void main (String[] args) {  
        Robot[] robotsA = new Robot[3]; //instantiate array of references to 3 Robot objects  
        System.out.println(robotsA[0]); //at start, array locations carry null  
        robotsA[0] = new Robot("C3PO"); //initialise entry at index 0  
        robotsA[1] = new Robot("C4PO"); //initialise entry at index 1  
        robotsA[2] = robotsA[0];        //initialise with same reference as index 0  
        Robot[] robotsB = {              //neat initialisation syntax using {...}  
            new Robot("C5PO"),  
            robotsA[0],  
            robotsA[1]  
        };  
        System.out.println(robotsB.length); //print size of array robotsB  
        for (Robot robot : robotsB)        //loop through entries, assign current to robot  
        {                                   //print name of current element  
            System.out.println(robot.name);  
        }  
    }  
}
```

This is an Iterator using the “:” notation, which provides a reference “robot” to each object held in the array turn-by-turn (The reference is not a one to the array location itself, which is not an object.)



...beware, it is the wrath of the null that you need to defend against in your programming...