

Arrays and Methods

Java
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Method with Arrays

Arrays can be passed into methods
and returned by methods!

```
public static int[] myArrayMethod(int[] x) {  
    return x;  
}  
public static void main(String[] args){  
    int [] a = new int[3];  
    a[0] = 1;  
    a[1] = 2;  
    a[2] = 3;  
    a = myArrayMethod(a);  
}
```

Method with Arrays

Arrays can be changed in different instances!

```
public static void myArrayMethod(int[] x){  
    x[0] = 10;  
    x[2] = 10;  
}  
  
public static void main(String[] args){  
    int [] a = new int[3];  
    a[0] = 5;  
    a[1] = 5;  
    a[2] = 5;  
    myArrayMethod(a);  
}
```

Array a ends with
the following
values:

a[0] = 10

a[1] = 5

a[2] = 10

Lab

1. Make a **toStringArray** method for your arrays
 - a. Print out ALL elements of your array
 - b. Input is an integer array
 - c. Returns nothing
2. Make a **getArrayAverage** method
 - a. Gets the average of all integer elements in an array
 - b. Input is an integer array
 - c. Returns an integer that's the average

Lab Continued

1. Make a **getArrayMax** method
 - a. Gets the maximum of all integer elements in an array
 - b. Input is an integer array
 - c. Returns an integer that's the maximum
2. Make a **getArrayMin** method
 - a. Gets the minimum of all integer elements in an array
 - b. Input is an integer array
 - c. Returns an integer that's the minimum

Lab Continued Final

1. In your main
 - a. Create an array of 100 random integers in an array
 - i. Values between 1 and 100
 - b. Call **toStringArray** on the array
 - c. Call **getArrayAverage** on the array
 - d. Call **getArrayMax** on the array
 - e. Call **getArrayMin** on the array