Array



- Arrays are a data structure
- Arrays are useful for processing a group of variables of the same type
- Array is a sequence of variables of the same type stored in contiguous memory
- Each variable is called an element
- Elements are accessed using a subscript called an index (int value)

base			
>			

▼ Declaring an array

```
datatype [] arrayName; //does not create an array
//creates a reference
```

▼ Creating an array

- 1. keyword *new*
- 2. initializer list

```
datatype [] arrayName = new datatype [size];
```

```
arrayName.length() //is a read-only instance variable
```

▼ Enhanced for loop

used to loop through arrays without using an index

1. process the array in order

- 2. does not change any of the values in the array
- 3. use when don't need to know the index or change the array

```
public static void main (String []args) {
  int exampleArray[] = {2, 4, 6, 8, 10}

  for (int i: exampleArray) {
    System.out.println(i);
  }
}
```

Array 2