

# Lab KeyValuePair<K,V>

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- Declare a generic class called KeyValuePair
- It has two type parameters, K and V
- Declare two fields: key of type K and value of type V
- Create a parameterized constructor to initialize the fields
- Use Eclipse to implement getters, setters,  
In the Outline window right click KeyValuePair  
select Source > Generate Getters and Setters  
create getters and setters for all fields
- Use Eclipse to implement equals and hashCode  
Once again in the Outline window go to  
select Source > Generate hashCode() and equals()  
leave both fields checked in order to base the equality comparison on the value of both fields
- Override toString to print the pair in the form  
(Key, Value) .. including the parenthesis and the comma

Create a class called PairApp; it includes the main method.

In main do the following:

- Create two KeyValuePair's p1 and p2.
- Each pair consists of the name of a city (key) and the population (associated value)
  - SLC .. 189899
  - NY .. 8244910
- Print p1 and p2 in separate lines
- Compare p1 to p2 and print the result
- Assign p2 to p1
- Once again print p1 and p2 in separate lines
- Compare p1 to p2 and print the result

## Output:

```
p1: (SLC, 189899)
p2: (NY, 8244910)
p1.equals(p2): false
```

```
p1: (NY, 8244910)
p2: (NY, 8244910)
p1.equals(p2): true
```