

EXERCISE

Recap

Map is a data collection that has name “dictionary” in several languages. Maybe “dictionary” is a more explanatory name indeed.

Map has a key as the label of an object and this key points to the real object.

Map is used for collecting and indexing several instances. Whatever attribute you need to search, you may select it for indexing. Index attribute will be your key.

You may select another value independent from the object itself as a key. This will be a logical key (index).

If you know RDBMS systems and database tables, this approach will be familiar to you. You may either pick one of the attributes as index or you may select a totally independent string or integer value as index.

After selecting your index you will put a key-value pair with:

```
map.put("key", valueObject)
```

and then you will search the object labeled with “key” with:

```
map.get("key")
```

 and this will return valueObject to you.

Objectives

- Using a logical key inside Hashmap
- Storing and getting back an object from a HashMap
- Overriding a value in HashMap

Activities

- Create a class named LetterCounter. Inside id, create a method with signature:
- **Map<String, Integer> harfSay (String sentence)**

This method will calculate the occurrence count of each letter inside given sentence. For instance if the sentence below is given as parameter, the map result should yield:

PLATFORM

Java 8 JDK

Eclipse IDE

Example: “Java, is the most used object oriented language”

Key	Value
J	1
a	4
v	1
,	1
i	2
s	3
t	4
... other letters here	

- Write another method inside the same class with signature:

```
public void printTheLetterCounts(Map m)
```

This method will print out the occurrence count of each letters in above format.

- Try both methods inside the main method.