**Exercises**:

* Create a set from a list containing duplicate elements. What do you observe? How can you achieve the same result without converting a list to a set?
* Get first and last element of Range.
* Print the table of a given number : 2 and 12
* We have a sorted list of alphabets a-z, print all alphabets appearing after "j"
* Create a new map consisting of 10 of your friend's name's as keys and their ages as value.
* Iterate over the previous map in as many ways as possible
* Create a new map by adding two existing maps
* Try the following code on a map:

**println map.class**

**println map.getClass()**

What do you observe?

* Consider the following map:

**Map m = ['1' : 2, '2' : 3, '3' : 4, '2':5]**

Is this a valid construction? What is the value of m['2']?

* Find if a map contains a particular key.
* Consider the following map:

**Map m = [**

**‘Computing’ : [‘Computing’ : 600, ‘Information Systems’ : 300],**

**‘Engineering’ : [‘Civil’ : 200, ‘Mechanical’ : 100],**

**‘Management’ : [‘Management’ : 800]**

**]**

a) How many university departments are there?

b) How many programs are delivered by the Computing department?

c) How many students are enrolled in the Civil Engineering program?

* Consider a class named "Employee" which has the following properties:

1) Name

2) Age

3) DepartmentName

4) EmployeeNumber

5) Salary

Let's say that there's a list of 50 employees available. Perform the following operations on the list of employees:

a) Group the employees on the basis of the bracket in which their salary falls. The ranges are 0-5000, 5001 and 10000, and so on.

b) Get a count of the number of employees in each department

c) Get the list of employees whose age is between 18 and 35

d) Group the employees according to the alphabet with which their first name starts and display the number of employees in each group whose age is greater than 20

e) Group the employees according to their department.

* Write a method which returns the value of passed key from a search string of the form  "[http://www.google.com?name=johny&age=20&hobby=cricket](http://www.google.com/?name=johny&age=20&hobby=cricket)"