

Programming Assignment #7 HashTable

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Programming Challenge A)

```
import java.util.Enumeration;
import java.util.Hashtable;

public class hashdemo2018 {

    public static void main(String args[])
    {
        Hashtable<String, String> companies = new Hashtable <String, String>();

        companies.put("Google", "United States");
        companies.put("Nokia", "Finland");
        companies.put("Sony", "Japan");

        companies.get("Google");

        System.out.println("Does hashtable contain Google as key: " +
companies.containsKey("Google"));

        System.out.println("Does hashtable contain Japan as key: " +
companies.containsKey("Japan"));

        Enumeration<String> enumeration = companies.elements();

        while(enumeration.hasMoreElements())
        {
            System.out.println("Hashtable values: " + enumeration.nextElement());
        }

        System.out.println("Is companies hashtable empty: " + companies.isEmpty());
    }
}
```

```

        System.out.println("Size of hashtable in Java: " + companies.size());

        companies.clear();

    }

}

```

Programming Challenge B)

```

import java.util.Enumeration;
import java.util.Hashtable;
import java.util.Scanner;

public class BoatNamesHashTable {

    public static void main(String args[])
    {
        Hashtable<String, String> boats = new Hashtable <String, String>();

        Scanner scn = new Scanner(System.in);

        System.out.println("Please enter the number of boats in the marina: ");

        int numBoats = scn.nextInt();

        String boatName;
        String license;

        for(int i = 0; i < numBoats; i++)
        {
            System.out.println("Please enter the name of boat #" + (i+1) );
            boatName = scn.next();

            System.out.println("Please enter the boat license for boat #" + (i+1));

```

```
        license = scn.next();

        boats.put(boatName, license);

    }

    Enumeration<String> enumeration = boats.elements();

    while(enumeration.hasMoreElements())
    {
        System.out.println("Hashtable values: " + enumeration.nextElement());
    }

    System.out.println("Is boats hashtable empty: " + boats.isEmpty());

    System.out.println("Size of hashtable in Java: " + boats.size());

    boats.clear();

}

}
```