HashMap Example (1/3)

```java
import java.util.HashMap;
import java.util.Scanner;
import java.util.Iterator;

public class HashMapDemo {
  public static void main(String[] args) {
    HashMap<String, Employee> employees =
        new HashMap<String, Employee>(10);

    employees.put("Joe",
        new Employee("Joe", new Date("September", 15, 1970)));
    employees.put("Andy",
        new Employee("Andy", new Date("August", 22, 1971)));
    employees.put("Greg",
        new Employee("Greg", new Date("March", 9, 1972)));
    employees.put("Kiki",
        new Employee("Kiki", new Date("October", 8, 1970)));
    System.out.println("Added Joe, Andy, Greg, and Kiki to the map.");
```

HashMap Example (2/3)

```java
Scanner keyboard = new Scanner(System.in);
String name = "";
do {
    System.out.print("\nEnter a name to look up the map. ");
    System.out.println("Press enter to quit.");
    name = keyboard.nextLine();
    if (employees.containsKey(name)) {
        Employee e = employees.get(name);
        System.out.println("Name found: " + e.toString());
    } else if (!name.isEmpty()) {
        System.out.println("Name not found");
    }
} while (!name.isEmpty());
System.out.println("Created HashMap: " + employees);
Iterator<HashMap.Entry<String, Employee>> iter = employees.entrySet().iterator();
while (iter.hasNext()) {
    HashMap.Entry<String, Employee> entry = iter.next();
    System.out.println(entry.getKey() + ": " + entry.getValue().toString());
    }
  }
}
```

HashMap Example (3/3)

Added Joe, Andy, Greg, and Kiki to the map.
Enter a name to look up in the map. Press enter to quit.
Joe
Name found: Joe September 15, 1970
Enter a name to look up in the map. Press enter to quit.
Frank
Name not found
Enter a name to look up in the map. Press enter to quit.

Created HashMap: {Joe=Joe September 15, 1970, Greg=Greg March 9, 1972, Andy=Andy August 22, 1971, Kiki=Kiki October 8, 1970}
Joe : Joe September 15, 1970
Greg : Greg March 9, 1972
Andy : Andy August 22, 1971
Kiki : Kiki October 8, 1970