Consider the class:

```java
public class CC {
    private int cint;
    private String cstring;
    public CC(int ii, String jj) {}}
```

1. Write a useful toString method for this class

   ```java
   public String toString() {
       return "cint: ["+cint+" ] cstring: ["+cstring+" ]";
   }
   ```

2. Extend the constructor to actually store the passed in values

   ```java
   public CC(int ii, String jj) {
       cint = ii;
       cstring = jj;
   }
   ```

3. Write a loop to create 10 instances of this class with the arguments
   
   - 1, “JJ1”
   - 3, “JJ3”
   - 5, “JJ5”
   - etc

   ```java
   // this did not need to be in a function, but it was convenient for me to do so
   public void make10() {
       for (int i=0; i<10; i++) {
           CC cc = new CC(i*2+1, "JJ"+(i*2+1));
           System.out.println(cc);
       }
   }
   ```

4. Write all of the code you would need to store 10 different instances of this class:
   
   1. An array

   ```java
   public CC[] put10Array() {
   ```
CC[] ca = new CC[10];
for (int i=0; i<10; i++) {
    CC cc = new CC(i*2+1, "JJ"+(i*2+1));
    ca[i]=cc;
}
return ca;

2. An ArrayList

public ArrayList<CC> put10ArrayList() {
    ArrayList<CC> ca = new ArrayList<>();
    for (int i=0; i<10; i++) {
        CC cc = new CC(i*2+1, "JJ"+(i*2+1));
        ca.add(cc);
    }
    return ca;
}

3. An instance of Map206 where the key is the string passed to the constructor as jj

4. An instance of java.util.HashMap where the key is the string passed to the constructor as jj

public HashMap<String, CC> put10Hash() {
    HashMap<String, CC> ca = new HashMap<>();
    for (int i=0; i<10; i++) {
        CC cc = new CC(i*2+1, "JJ"+(i*2+1));
        ca.put("JJ"+(i*2+1), cc);
    }
    return ca;
}

5. Write code to read and print each of the items stored in the 4 structures filled in step 3.

public void printA() {
    CC[] ccq = put10Array();
    for (int i=0; i<ccq.length; i++) {
        System.out.println(i + " " + ccq[i]);
    }  
}

public void printAL() {
    ArrayList<CC> ccal = put10ArrayList();
}
for (int i=0; i<ccal.size(); i++) {
    System.out.println(i + " " + ccal.get(i));
}

public void printHM() {
    HashMap<String, CC> cchm = put10Hash();
    // this was not discussed in class and will not be on test
    for (String key : cchm.keySet()) {
        System.out.println(key + " " + cchm.get(key));
    }
}