

## Assignments on Generics

- 1) Use a HashSet to hold Employee Objects. Upon running the application, the details of the employees added to the HashSet should be displayed.

**Employee** <<class>>

-- id

-- name

-- salary

-- department

-- displayDetails()

Feel free to add properties and methods to Employee Class

**Note:** if we try to store any object other than Employee Object in HashSet, we should not be allowed to.

- 2) Write an application to hold 10 random int values as keys and 10 random double values as values for a HashMap. Print the data store in the HashMap. **Note:** Keys can only be int and values double
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- 3) Write a generic method to exchange the positions of two different elements in an array.
- 4) Design a class named **Pair** which has two properties. The name of the first property is *key* and that of the second property is *value*. When designing the class take case of the following scenarios:
- a. Create an Object of Pair class to store **String** value for the property *key* and **String** value for the property *value*. Restriction Apart from String type no other types should be acceptable as Key or value input

e.g.

```
myObj.setKey("1");  
myObj.setValue("Hello");
```

- b. Create an object of the class Pair to store **String** value for the property *key* and **java.util.Date** as value for the property *value*

```
myObj.setKey("Today is");  
myObj.setValue(new java.util.Date());
```

Note: In scenario **a.** no data apart from String should be used for key and value, in scenario **b.** no data apart from String for key and java.util.Date should be allowed