1. Create a Student bean class with following fields:

● roll  
● name ● marks

create a HashMap as

● key:String(Indian-statename)  
● value:Student(studentobjectwiththeproperdetails)

Sort this HashMap according to their value (according to the Student marks) and print the state name and the corresponding student details in sorted order

Ans.

Map<String, Student> student=new HashMap<>();

student.put("Bihar", new Student(1,"BIGYAN",100));

student.put("Jharkahand", new Student(2,"RAM",200));

student.put("New Delhi", newStudent(3,"SHYAM",1500));

student.put("Rajasthan", new Student(4,"RANI",120));

student.put("Punjab", new Student(5,"RAKESH",300));

student.put("UP", new Student(6,"JAVA",500));

List<Map.Entry<String,Student>> list=new ArrayList<Map.Entry<String,Student>>(student.entrySet());

System.***out***.println(list);

Collections.*sort*(list,(s1,s2)-> s1.getValue().getMarks()>s2.getValue().getMarks() ? +1 : -1);

System.***out***.println(list);

**4.** Differentiate between Comparable and Comparator.

Ans. I want to tell you that both are use for sorting. And comparable is a functional interface which is belong to java.lang package. And if we want to write sorting algo. Inside class than we opt comparable and Comparator is also an functional interface. It belongs java.utill package and if we want to write sorting algo. Outside of class that we use comparator.

7. Explain Functional Interface with an example.

Ans. An interface which has only one abstract method that is called functional interface. It can have multiple default and static method. Some predefined functional interface also present in java that is comparable, comparator, predicate, consumer etc..

8. Differentiate between a predicate and a function in Java 8.

And. Predicate checks whether supplied object satisfying condition or not and as par condition create new objects. And function interface it takes object as T type and return object R type.