package Collections.Maps;  
  
import java.lang.reflect.Array;  
import java.util.\*;  
  
public class MapDemo {  
 public static void main(String[] args) {  
 Map<String,Integer> map1=new HashMap<>();  
 map1.put("John",25);  
 map1.put("Raj",29);  
 map1.put("Anita",null);  
 map1.put("Anitaa",23);  
 map1.put("Raj",24);  
 map1.put("Rosh",24);  
 map1.put("Rohan",30);  
 map1.put("Maxim",33);  
 map1.put(null,null);  
 map1.remove("Rosh");  
  
 // imp methods of Map  
 Collection<Integer> values= map1.values();  
 Integer rajValue= map1.get("Raj");  
 Integer removejohn=map1.remove("John");  
 boolean containsAnitaa=map1.containsKey("Anitaa");  
 boolean containsValue=map1.containsValue("33");  
 int sizeofMap=map1.size();  
 System.*out*.println("values:"+values+" rajValue:"+rajValue+" removejohn:"+removejohn+" containsAnitaa:"+containsAnitaa+" containsValue:"+containsValue+" sizeofMap:"+sizeofMap);  
  
 // key set  
 System.*out*.println("Key Set name ");  
 Set<String>names= map1.keySet();  
 for (String name:names){  
 System.*out*.print(name+" ");  
 }  
 // entry set  
 System.*out*.println(" \n entrySet name and value");  
 Set<Map.Entry<String, Integer>> mappings= map1.entrySet();  
 for (Map.Entry<String, Integer> mapping:mappings){  
 String name=mapping.getKey();  
 Integer value=mapping.getValue();  
 System.*out*.println("entrySet name: "+name+" entrySet value: "+value);  
 }  
  
 // put all  
 Map<String,Integer> map12=new HashMap<>();  
 map12.put("Kiran",25);  
 map12.put("July",29);  
 map12.put("Hansie",null);  
 map1.putAll(map1);  
 System.*out*.println("putAll:"+map1);  
  
 // replace  
 Integer replacedValue=map12.replace("Kiran",30);  
 System.*out*.println("after repacing:"+map1+" replaceValue:"+replacedValue);  
  
 //clear and isEmpty  
 map1.clear();  
 System.*out*.println("after clearing:"+map1+" map1.isEmpty?: "+map1.isEmpty());  
 }  
}

C:\Users\Roystan\.jdks\openjdk-21.0.2\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.3.3\lib\idea\_rt.jar=61122:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.3.3\bin" -Dfile.encoding=UTF-8 -Dsun.stdout.encoding=UTF-8 -Dsun.stderr.encoding=UTF-8 -classpath C:\Users\Roystan\IdeaProjects\JavaWorkspace\out\production\JavaWorkspace Collections.Maps.MapDemo

values:[null, 23, 33, 24, null, 30] rajValue:24 removejohn:25 containsAnitaa:true containsValue:false sizeofMap:6

Key Set name

null Anitaa Maxim Raj Anita Rohan

entrySet name and value

entrySet name: null entrySet value: null

entrySet name: Anitaa entrySet value: 23

entrySet name: Maxim entrySet value: 33

entrySet name: Raj entrySet value: 24

entrySet name: Anita entrySet value: null

entrySet name: Rohan entrySet value: 30

putAll:{null=null, Anitaa=23, Maxim=33, Raj=24, Anita=null, Rohan=30}

after repacing:{null=null, Anitaa=23, Maxim=33, Raj=24, Anita=null, Rohan=30} replaceValue:25

after clearing:{} map1.isEmpty?: true

Process finished with exit code 0