package Collections.Sets;  
  
import java.util.ArrayDeque;  
import java.util.HashSet;  
import java.util.Iterator;  
import java.util.Set;  
  
public class SetsDemo {  
 public static void main(String[] args) {  
 Set<String> names = new HashSet<String>();  
 names.add("James");  
 names.add("Peter");  
 names.add("Peter");  
 names.add("PETER");  
 names.add("John");  
 names.add("John");  
 names.add("Andrew");  
 System.*out*.println(names);  
  
// Colections unimplemented methods  
 Set<String> newName = new HashSet<>();  
 Boolean isadded = newName.add("Man");  
 newName.add("Lawrene");  
 newName.add("Hilda");  
 newName.add("Roy");  
 newName.add("Rohan");  
 Boolean removeif = newName.remove("Roy");  
 System.*out*.println("newName " + newName + "removeif " + removeif);  
  
 Boolean hasContains = names.contains("Rohan");  
 System.*out*.println("hasContains " + hasContains);  
  
 Boolean addedAll=names.addAll(newName);  
 System.*out*.println("names after AddAll " + names +" addedAll " + addedAll);  
  
 Boolean retainAll= names.retainAll(newName);  
 System.*out*.println("names after retainAll " + names+" retainAll " + retainAll);  
  
 Boolean containsAll= names.containsAll(newName);  
 System.*out*.println(" containsAll " + containsAll);  
  
 Boolean removeAll= names.removeAll(newName);  
 System.*out*.println("names after removeAll " + names+" removeAll " + removeAll);  
  
 System.*out*.println(" isEmpty " + names.isEmpty());  
  
 names.add("karan");  
 names.add("kiran");  
 names.add("Sunil");  
 System.*out*.println("names after New Elemets added " + names);  
  
 String[] finalNamesArray = names.toArray(new String[0]);  
 for (String finalAnimal : finalNamesArray) {  
 System.*out*.println(" " + finalAnimal);  
 }  
 Object[] listAarray = names.toArray();  
 int count = 0;  
 System.*out*.println("ArrayValues");  
 for (Object arrayedValues : listAarray) {  
 System.*out*.println("index " + count + "Arrayvalues " + arrayedValues);  
 count++;  
 }  
  
 System.*out*.println("\n Iterated values");  
 Iterator<String> ascendingIterator=names.iterator();  
 {  
  
 while (ascendingIterator.hasNext()) {  
 String value = ascendingIterator.next();  
 if (value.equals( "Sunil")) {  
 ascendingIterator.remove();  
// ascendingIterator.forEachRemaining(x->System.out.println(x+"Remaining"));  
 }  
 System.*out*.print(" "+value);  
 }  
 }  
  
 Set<String> newName1 = new HashSet<>();  
 Set<String> newName2 = names;  
 newName1.add("karan");  
 newName1.add("kiran");  
 newName1.add("Sunil");  
 System.*out*.println("names equal to newName1?: "+ names.equals(newName1)+", names equal to newName2?: "+ names.equals(newName2) );  
 names.clear();  
  
  
  
  
  
 }  
  
}

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=61042: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.Sets.SetsDemo

[James, Andrew, John, Peter, PETER]

newName [Man, Lawrene, Hilda, Rohan]removeif true

hasContains false

names after AddAll [James, Andrew, John, Peter, PETER, Man, Lawrene, Hilda, Rohan] addedAll true

names after retainAll [Man, Lawrene, Hilda, Rohan] retainAll true

containsAll true

names after removeAll [] removeAll true

isEmpty true

names after New Elemets added [kiran, Sunil, karan]

kiran

Sunil

karan

ArrayValues

index 0 Arrayvalues kiran

index 1 Arrayvalues Sunil

index 2 Arrayvalues karan

Iterated values

kiran Sunil karan names equal to newName1?: false, names equal to newName2?: true

Process finished with exit code 0