1. What is the index of Brighton in the following array?

String[] skiResorts = {

"Whistler Blackcomb", "Squaw Valley", "Brighton",

"Snowmass", "Sun Valley", "Taos"

};

Write an expression that refers to the string Brighton within the array

What is the value of the expression skiResorts.length?

What is the index of the last item in the array?

What is the value of the expression skiResorts[4]?

1. Write a Java program to sort a numeric array and a string array.
2. Write a Java program to sum values of an array
3. Write a Java program to calculate the average value of array elements.
4. Write a Java program to test if an array contains a specific value
5. Write a Java program to remove a specific element from an array
6. Write a Java program to insert an element (specific position) into an array.
7. Write a Java program to find the maximum and minimum value of an array.
8. Write a Java program to reverse an array of integer values.
9. Write a Java program to find the second largest element in an array.
10. Write a Java program to get the difference between the largest and smallest values in an array of integers. The length of the array must be 1 and above.
11. Write a Java program to compute the average value of an array of integers except the largest and smallest values.
12. Write a Java program to remove the duplicate elements of a given array and return the new length of the array.  
    Sample array: [20, 20, 30, 40, 50, 50, 50]  
    After removing the duplicate elements the program should return 4 as the new length of the array.
13. Write a Java program to replace every element with the next greatest element (from right side) in the given array of integers.
14. Write a Java Program to reverse the string array contents.
15. Write a Java Program to remove a particular element from a string array.
16. Do this exercise
    1. Realize a Java class whose objects maintain some information on the owners of apartments.
    2. Each object of the class should contain a string that indicates the name of the owner, and an array of 10 slots of type string, indexed by the numbers from 0 to 9, that can contain each the address of an apartment owned by that owner (or null, if the slot is empty).
    3. The class should export the following functionalities:
       1. a constructor that takes as parameter the name of the owner, and creates an object with the specified owner and in which all slots of the array are initially empty;
       2. a method that returns the owner of an apartment;
       3. a method that returns the address contained in a slot (or null, if the slot is empty);
       4. a method to assign the address of an apartment to a slot;
       5. a method that returns the number of apartments (i.e., of non-empty slots);
       6. a method that reorganizes the addresses in such a way that they are contained in the first consecutive slots of the array;
       7. a method toString, that overrides the toString method inherited from Object, and returns a string containing the information about the object.

public class ApartmentOwner {

// representation of the objects of the class

private String owner;

private String[] apartments;

// public methods that realize the requested functionalities

public ApartmentOwner() {…}

public ApartmentOwner(String name) {…}

public String getOwner() { ... }

public String getApartment(int slot) { ...

public void setApartment(String address, int slot) { ... }

public int countApartments() { ... }

public void reorganizeApartments() { ... }

public String toString() { ... }

}