Assignment Questions on Java Vector

1. Creating and Adding Elements:

Write a Java program to create a Vector of strings. Add five different fruit names to the vector and display the contents of the vector.

2. Accessing Elements:

Write a Java program to create a Vector of integers. Add the first ten natural numbers to the vector. Then, print the third element of the vector.

3. **Updating Elements**:

Write a Java program to create a Vector of double values. Add five different values to the vector. Replace the second value with a new value and display the updated vector.

4. Removing Elements:

Write a Java program to create a Vector of characters. Add five characters to the vector. Remove the third character from the vector and display the remaining elements.

5. Checking Existence:

Write a Java program to create a Vector of strings. Add five city names to the vector. Check if the vector contains the city "Paris" and display the result.

6. **Iterating through a Vector**:

Write a Java program to create a Vector of integers. Add the first ten even numbers to the vector. Use a for loop and an Iterator to iterate through the vector and print each element.

7. Sorting a Vector:

Write a Java program to create a Vector of strings. Add five country names to the vector. Sort the vector in alphabetical order and display the sorted vector.

8. Copying a Vector:

Write a Java program to create two Vector objects of integers. Add the first five prime numbers to the first vector. Copy the contents of the first vector into the second vector and display both vectors.

9. Shuffling a Vector:

Write a Java program to create a Vector of integers. Add the first ten natural numbers to the vector. Shuffle the vector randomly and display the shuffled vector.

10. Converting an Array to Vector:

Write a Java program to create an array of strings with five elements. Convert this array into a Vector and display the contents of the Vector.

11. Student Management System:

Write a Java program to create a Vector of Student objects. Each Student object should have properties such as id, name, and grade. Add five students to the vector and display their details.

12. Library Management System:

Write a Java program to create a Vector of Book objects. Each Book object should have properties such as isbn, title, and author. Add five books to the vector and provide functionality to search for a book by its isbn.

13. Employee Management System:

Write a Java program to create a Vector of Employee objects. Each Employee object should have properties such as id, name, and department. Add five employees to the vector and provide functionality to remove an employee by their id.

14. Movie Collection:

Write a Java program to create a Vector of Movie objects. Each Movie object should have properties such as title, genre, and year. Add five movies to the vector, sort them by year, and display the sorted vector.

15. Task Management System:

Write a Java program to create a Vector of Task objects. Each Task object should have properties such as id, description, and priority. Add five tasks to the vector and provide functionality to update a task's priority based on its id.

