## Activity-5

### Q-1

Develop a Java program for a shopping cart system that allows users to add, remove, and update items in their cart. The program should use the Scanner class to get details such as item name, price, and quantity from the user. Implement a class named Item to represent each item with attributes name, price, and quantity, along with getter and setter methods. Create a class named ShoppingCart to manage the shopping cart, using an ArrayList to store the items. Use Lambda expressions to calculate the total cost of items in the cart. The program should provide options for the user to add, remove, and update items in the cart, and display the final total cost. Test the program by adding items to the cart, removing items, updating quantities, and displaying the total cost after each operation.

### Q-2

Develop a Java program for managing the music playlist using a HashMap to store song details. Each song's identifier will serve as the key, mapped to a Song object containing the title, artist, and duration. Implement the following functionalities:

  i.   Add a new song to the playlist.
  ii.  Remove a song from the playlist by its identifier.
  iii. Update the details of a song in the playlist.
  iv.  Search for a song by its title or artist.
  v.   Display all songs in the playlist sorted alphabetically by title.
  vi.  Display the total duration of all songs in the playlist.

Utilize Lambda expressions in interfaces and methods for tasks such as sorting and searching. For example, use a Comparator with a Lambda expression to sort the songs alphabetically by title, and use filter() method with Lambda expressions to search for songs by title or artist.Test the program by performing operations such as adding songs, removing songs, updating details, searching for songs, and displaying the total duration of all songs.