**How to Use the Collections.binarySearch(..) Method**

// Sort the catalog by album name

Collections.sort(Catalog); OR

// Comparator class by artist name  
 AlbumComparator comparator = new AlbumComparator();

// Sort the catalog by artist name  
 Collections.sort(Catalog, comparator);  
  
 //Read input from user  
 Scanner in = new Scanner(System.in);

System.out.print("\nPlease enter the album name : "); //OR artist name…..

String input = in.nextLine();

//Search for Album entered  
  **int index = Collections.binarySearch(Catalog, new Album(input, input, null)); // OR new Album(null, input, null)**

if (index < 0)   
 {  
 System.out.println("\nAlbum not found.\n");  **// OR System.out.println("\nArtist not found.\n");**   
 }   
 else  
 {  
 System.out.println("\nAlbum Name: " + Catalog.get(index).getAlbumName()   
 + "\nArtist Name: " + Catalog.get(index).getArtistName() + "\n\nTracks: ");

OR

System.out.println("\nArtist Name: " + Catalog.get(index).getArtistName());

ArrayList<Track> tAux = Catalog.get(index).getTrackList();

Collections.sort(tAux);  
  
 for (int j = 0; j < tAux.size(); j++) {  
 System.out.println("track " + j + " : " + tAux.get(j).getSongName());

OR  
 for (int i = 0; i < Catalog.size(); i++) {  
 if (Catalog.get(i).getArtistName().equalsIgnoreCase(input)) {  
 System.out.println("\nAlbum Name: " + Catalog.get(i).getAlbumName() + "\n\nTracks: ");  
 ArrayList<Track> tAux = Catalog.get(i).getTrackList();  
 Collections.sort(tAux);  
 for (int j = 0; j < tAux.size(); j++) {  
 System.out.println("track " + j + " : " + tAux.get(j).getSongName());  
 }  
 }  
 }