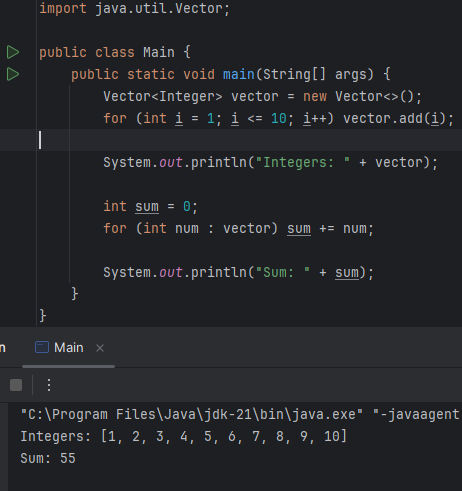
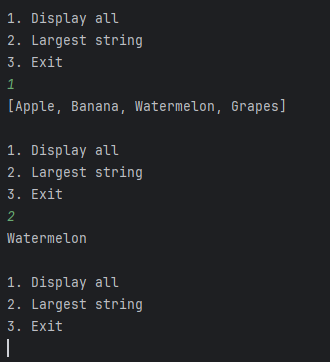
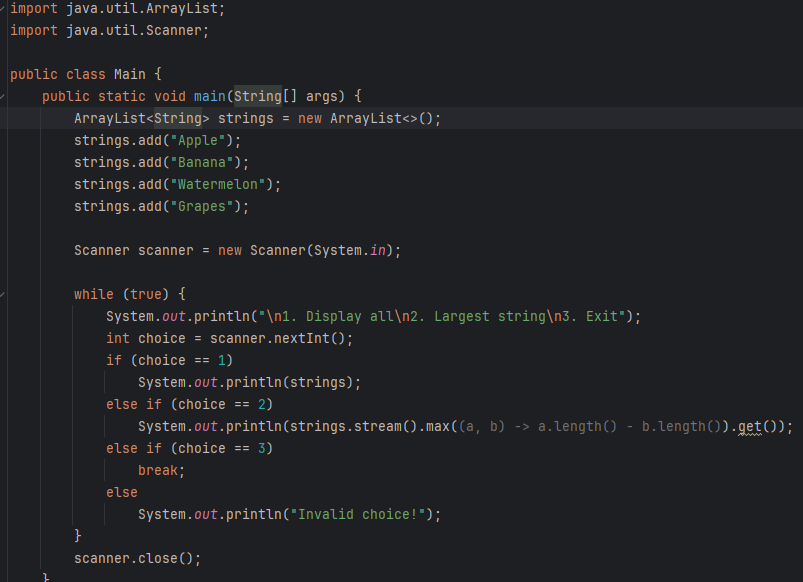
LAB#02

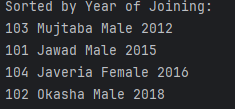
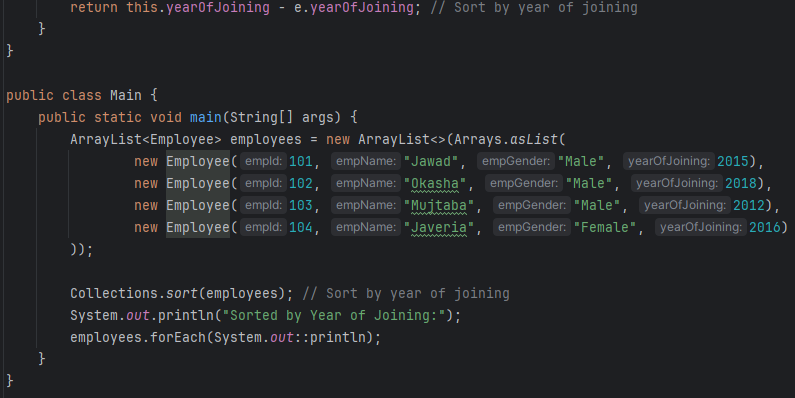
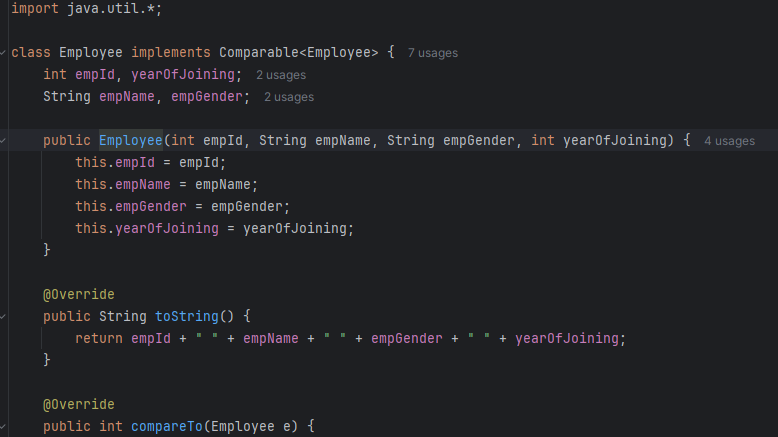
LAB TASK

1. Write a program that initializes Vector with 10 integers in it. Display all the integers and sum of these integers.



2. Create a Array List of string. Write a menu driven program which: a. Displays all the elements b. Displays the largest String

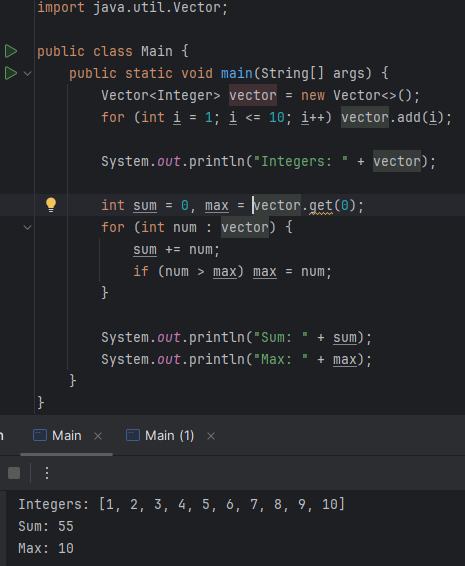
3. Create an Array list storing Employee details including Emp\_id, Emp\_Name, Emp\_gender, Year\_of\_Joining (you can also add more attributes including these). Then sort the employees according to their joining year using Comparator and Comparable interfaces.

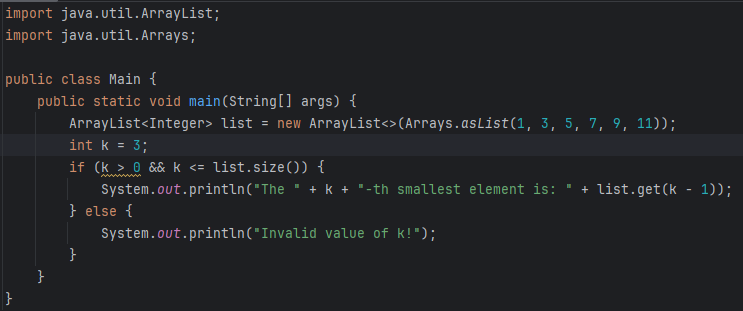


4. Write a program that initializes Vector with 10 integers in it.

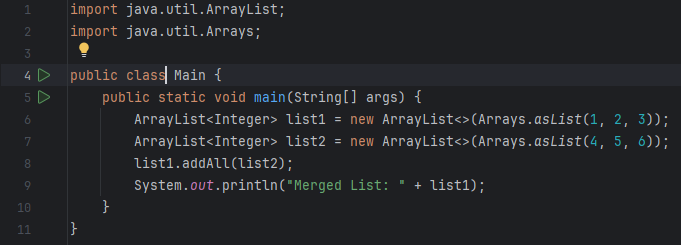
• Display all the integers

• Sum of these integers.

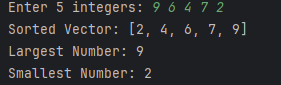
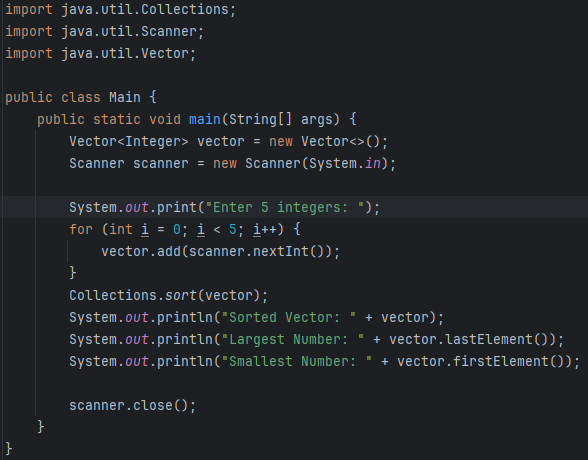
• Find Maximum Element in Vector

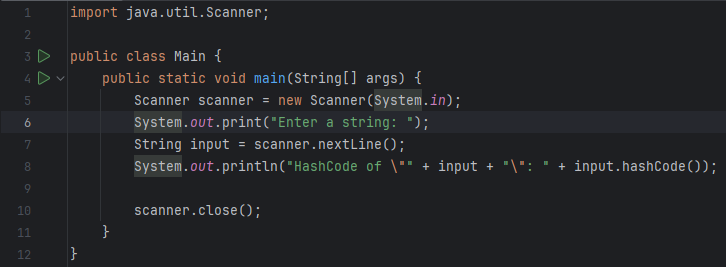
5Find the k-th smallest element in a sorted Array List. 

6. Write a program to merge two Array Lists into one.



HOME TASK

1. Create a Vector storing integer objects as an input. a. Sort the vector b. Display largest number c. Display smallest number

1. Write a java program which takes user input and gives hash code value of those inputs using hash Code () method. 

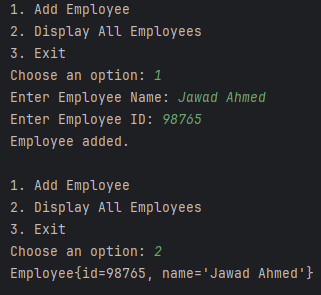
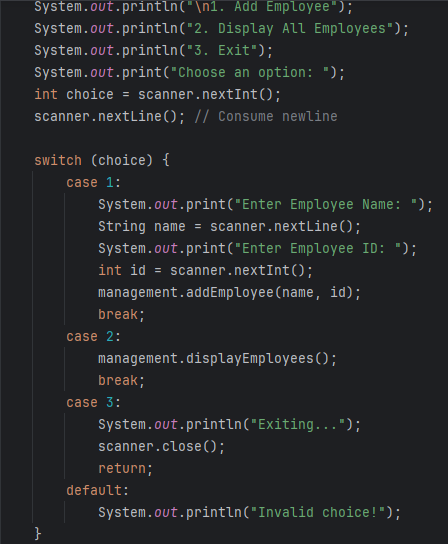
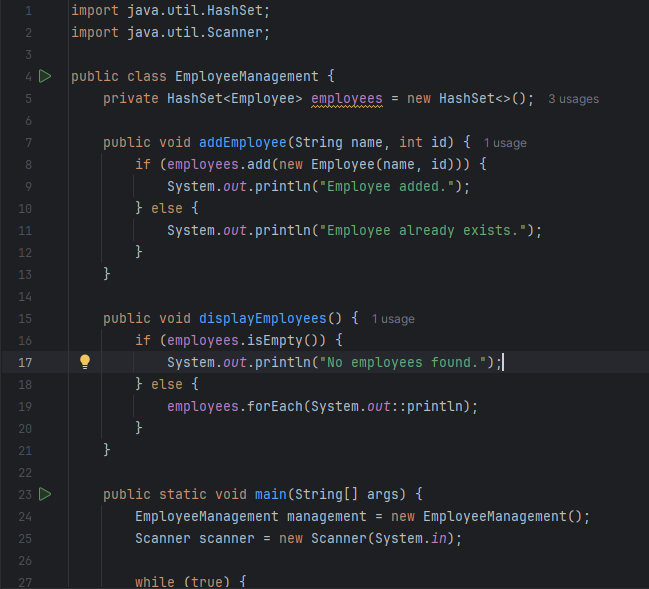
3.Create a java project, suppose you work for a company that needs to manage a list of employees. Each employee has a unique combination of a name and an ID. Your goal is to ensure that you can track employees effectively and avoid duplicate entries in your system. Requirements a. Employee Class: You need to create an Employee class that includes:

• name: The employee's name (String).

• id: The employee's unique identifier (int).

• Override the hashCode() and equals() methods to ensure that two employees are considered equal if they have the same name and id. b. Employee Management: You will use a HashSet to store employee records. This will help you avoid duplicate entries. c. Operations: Implement operations to

• Add new employees to the record.

• Check if an employee already exists in the records. • Display all employees. 

4Create a Color class that has red, green, and blue values. Two colors are considered equal if their RGB values are the same