Activity 3:

1. Write a program to demonstrate the knowledge of students in working with Java collection framework.

Eg., Assume only a maximum of 3 courses can be registered by a student for week end semester classes. Create a hashmap 'h1' with 'n' key-value pairs where keys are the names of students and values are the courses registered by them. Create another hashmap 'h2' with 'm'key-value pairs where keys are the names of courses offered for B.Tech and values are the names of faculty handling the courses. Write appropriate code to

- Add or remove a student from h1
- Iterate over the maps and display the key-value pairs stored in them
- Given a student name, fetch the names of all those who teach him/her.

Eg:, if the elements of h1 are

| Stud | Courses registered |
|------|-------------------------|
| name | |
| A | Python, maths, c |
| В | c, c++ |
| C | C++, physics, chemistry |

And if the elements of h2 are

| Course name | Faculty |
|-------------|---------|
| Python | 111 |
| Maths | 222 |
| С | 333 |
| C++ | 444 |
| Physics' | 555 |
| Chemistry | 666 |
| Digital | 777 |
| electronics | |

For the student "B", faculty should be displayed as 333 and 444.

- 2. Write a Java program using JavaFX, when user enter a coursecode in one textfield, course title should be displayed in another textfield with an action event.
- 3. Using JDBC, create a state table with statename, statecapital as data fields. Perform CRUD operations on state table using JDBC.