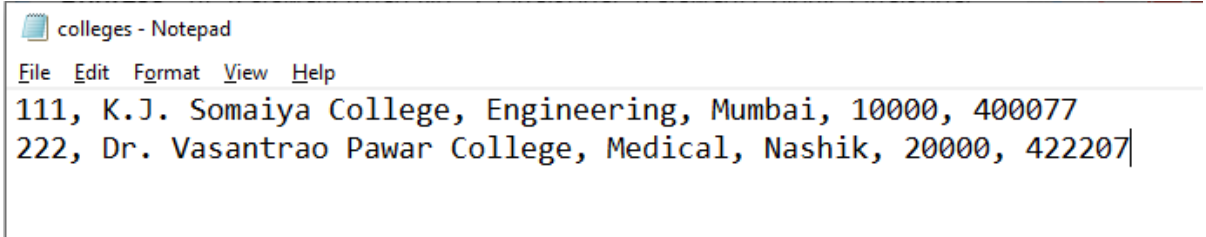# Case Study on Java/C#/Python – LBJ 2021

Develop a standalone console based Java/C#/Python application which will manage various Colleges across the state.

1. **Create a class called as College with the following attributes (collegeId, collegeName, courseType, city, fees, pinCode)**

2. **The application will be responsible for storing all data in a file by the name (colleges.csv). A CSV file is nothing but a file with data separated by commas. Create colleges.csv file with initial data like this:**

```
colleges - Notepad
File  Edit  Format  View  Help
111, K.J. Somaiya College, Engineering, Mumbai, 10000, 400077
222, Dr. Vasantrao Pawar College, Medical, Nashik, 20000, 422207
```

3. **Next you need to write the code for the below functionalities:**
    a. **Register new College**
        i. Write code to read college details from the user and store the same user in above CSV file in the mentioned format
    b. **Display Colleges in Mumbai who teach Engineering**
        i. Write code for reading data from the CSV file for all matching records and display the same
    c. **Remove College based on collegeId**
        i. Write code to delete matching collegeId data from the CSV file in this case

When developing the application, the focus should be on modularity. Divide the code correctly amongst classes so that the design will be flexible and object oriented.

Case Study on WEB – LBJ 2021

Create a Login page using HTML which will look like this:

Username	☐
Password	☐
☐ Remember Me	
Login	

Once the user submits the form, write Javascript code which will perform the following tasks:
1. **Check if the username & password supplied is valid or invalid**
   a. **For ex: check if the username is LTI and password is 123**
2. **If the user is invalid then show an error message to the user:**

Invalid Username/Password. Try again!

Username	☐
Password	☐
☐ Remember Me	
Login	

3. **In case of a valid user, transfer the control to a welcome HTML page which will display a message "Welcome Back, <Logged In Username>"**
4. **If the Remember Me option was selected in case of a valid user, then the username & password should be encrypted and stored in a cookie on the client machine for 24 hours**
5. **Now for the next 24 hours if Login page is opened, you need to check if the required cookie is present, decrypt the username & password and if the data is valid, automatically transfer the control to the welcome page.**