



UNIVERSITY OF CENTRAL PUNJAB
FACULTY OF INFORMATION TECHNOLOGY

Spring 23
INTRODUCTION TO DATABASE SYSTEMS

Lab 1

Use Classical Model Schema

Task 1

Write a program to take inputs the following attributes and write on a file named (studentInfo.csv)

1. Registration Number
2. First Name
3. Last Name
4. Program
5. CGPA
6. Contact Number

The file should be like below:

Registration Number, First Name, Last Name Program, CGPA, Contact Number

L1F21BSCS0001, Sadia, Khan, BSCS, 3.27, 03321234123

L1F21BSCS0021, Shanya, Khan, BSCS, 3.27, 03321234124

L1F21BSCS0031, Ali, Khan, BSCS, 3.57, 03321234125

L1F21BSCS0041, Bilal, Khan, BSCS, 3.85, 03321234127

L1F21BSCS0022, Hammad, Ali, BSCS, 3.96, 03321234121

L1F21BSCS0025, Imran, Khan, BSCS, 3.21, 03321234148

Task 2

Write a program that displays the name of students whose CGPA is 3.5 or above.

Task 3

We have some files (department.csv and employee.csv). Write a function that displays those employees who are working in Research department.

department.csv

DeptID, DeptName

- 1, Research
- 2, Sales
- 3, Marketing
- 4, Administration
- 5, Quality Control

And **employees.csv**

EmpID, EmpName, EmpJoiningDate, DeptID, Contact, Salary, Marital Status

001, Imran, 15/07/2012, 1, 03331222567, 78000, Married
002, Saleem, 15/07/2012, 1, 03331233567, 160000, Married
003, Aziz, 15/10/2011, 1, 03331234557, 74000, Married
004, Jem Morison, 15/08/2012, 5, 0333124567, 78000, Married
005, Junaid, 15/07/2013, 3, 03331244567, 78000, Married
006, Jamshed, 15/01/2013, 4, 03001234568, 79000, Married
007, Asim, 01/01/2011, 2, 03003001234, 69000, Single,
008, Javeria, 02/07/2010, 2, 03211234568, 145000, Single
009, Zara, 02/01/2011, 4, 03010234568, 79000, Single

Task 4

Write a function that display those employee name and salary from employee, who earn 1500000 or greater on a year.

Task 5

Using above employee.csv file perform the following operations:

1. Find the name of the person who is getting highest salary.
2. Display the name whose salary is lowest.
3. Print the total number of employees who are married.
4. Print the name of employees who are single.
5. Print the average salary of all employees.
6. Print the name of employees whose salary is greater than Imran.
7. Print the name of employees whose salary is less than Aziz.
8. Search and display the information of Omar.