

Practical Assignment 4

- 1) **Create database in sqlite** named “Industry.db”. Create a table Department (d_id, d_name, no_of_employee, total_payment) table and Insert minimum 10 records.
Write a python program to access records from Department table and insert data into “dept.CSV” file with new column ‘average_payment’ calculating from ‘total_payment’ and ‘no_of_employee’. ($\text{average_payment} = \text{total_payment} / \text{no_of_employee}$)
Plot a scatter chart for department vs no_of_employee and department vs total_payment.

[*note: Take following values for d_name – like Sales, Marketing, Finance, Account, IT, Manufacturing, Testing, Purchase, Stock_Management, Production etc.]
- 2) **Write a python program** to create database named “College.db” in sqlite. Create table Teacher(t_id, t_name, salary, working_hours). Insert minimum 10 records.
Access Teacher table data and display data in descending order of salary.
Display name and working hours of teacher whose salary is highest.
Display name of teachers whose salary is between 45000 to 65000.
Display **subplot bar chart** t_id vs working_hours and **subplot line chart** t_id vs salary using subplot concept.
- 3) **Create database in sqlite** named “Bank.db”. Also create Bank_account (account_no, account_type(saving/current), balance) table and Insert minimum 10 records.
Write a python program which will maintain minimum 500 balance in account when withdraw some amount by specific user.
Also access records from Bank_account table whose balance is more than 99,999 and insert these data into ‘Lakhpatti.CSV’ file.
Plot a scatter chart for account_no vs balance.
- 4) **Create one CSV file** named “employee.csv”. Take minimum 10 records in this CSV file according to following EMP table.
Write a python program to import CSV file data into table EMP (e_id, e_name, salary, date_of_birth).
Plot a histogram chart for measure frequency of employees according to range of ages (30 to 45, 46 to 60, 61 to 75).
- 5) **Write a python program** to create database named “company.db” in sqlite. Also create table sales_product (order_no (primary key), p_id, p_name, p_unit_price, sales_quantity, sales_unit_price). **Take values from user** and insert minimum 5 records.
Access sales_product table data and display all data with ‘total_sales_price’ and ‘total_profit’.
($\text{total_sales_price} = \text{sales_quantity} * \text{sales_unit_price}$).
($\text{total_unit_price} = \text{p_unit_price} * \text{sales_quantity}$)
($\text{total_profit} = \text{total_sales_price} - \text{total_unit_price}$)
Plot a scatter which will show total_unit_price, total_sales_price and total_profit on single plot.