

**Govt. Engineering College Wayanad**  
**Department of Computer Science and Engineering**  
**Application Software Development Lab Questions-Week 4**

**EXP1: Implementation of Order By, Group By & Having clause.**

- 1) Create the database student.
- 2) Select the current database.
- 3) Create the following tables  
Data(reg\_no, name, sex, dept)
- 4) Include necessary data. min. Of 10 student details, including different sex and dept.
- 5) Input the following and view the output
  - a) SELECT `sex` FROM `Data`;
  - b) SELECT `sex` FROM `Data` GROUP BY `sex`;
  - c) SELECT `name`, `dept` FROM `Data`;
  - d) SELECT `name`, `dept` FROM `Data` GROUP BY `dept`;
  - e) SELECT `name`, `dept` FROM `Data` GROUP BY `dept` HAVING `dept` = CSE;
  - f) SELECT `reg\_no`, `name`, `dept` FROM `Data` ORDER BY `name`;
  - g) SELECT `reg\_no`, `name`, `dept` FROM `Data` ORDER BY `dept`;
  - h) SELECT `reg\_no`, `name`, `dept` FROM `Data` ORDER BY 1 DESC;
  - i) SELECT `reg\_no`, `name`, `dept` FROM `Data` ORDER BY 3 DESC;

**EXP2 : Implementation of various aggregate functions in SQL**

Consider the database for an organisation. Write the queries for the following

- (i) create the database company
- (ii) select the current database
- (iii) Create the following tables.
  - a. employee (Fname, Mname, Lname, SSN, Bdate, Address, Sex, Salary, SuperSSN, Dno).
  - b. department (Dname, Dnumber, MgrSSN, MgrStartDate).
  - c. department\_location (Dnumber, DLocation).
  - d. project(Pname, Pnumber, Plocation, Dnum)
  - e. work\_on(ESSN, Pno, Hours)

- (iv) Include necessary constraints.
- (v) List all the tables in the current database
- (vi) Display the structure of the employee table, department table, department\_location table, project, works\_on table.
- (vii) Insert values in to each table where one of the department name is 'Research'.
- (vii) Find the maximum salary, the minimum salary, and the average salary among all employees.
- (viii) Find the maximum salary, the minimum salary, and the average salary among employees who work for the 'Research' department.
- (ix) Retrieve the total number of employees in the employee table
- (x) Retrieve the total number of employees in the 'Research' department.

### **EXP3: Implementation of Order By, Group By & Having clause.**

Create the table shop with the following entries:

TABLE SHOP		
ID	SName	Area
S0001	ABC Computeronics	CP
S0002	All Infotech Media	GK II
S0003	Tech Shoppe	CP
S0004	Greeks Techno Soft	Nehru Place
S0005	Hitech Tech Store	Nehru Place

Create a table accessories with the following entries:

TABLE ACCESSORIES			
No	Name	Price	ID
A01	Mother Board	12000	S01
A02	Hard Disk	5000	S01
A03	Keyboard	500	S02
A04	Mouse	300	S01
A05	Mother Board	13000	S02
A06	Keyboard	400	S03
A07	LCD	6000	S04

Write queries to :

1. To display Name and Price of all the accessories in ascending order of their Price.

2. To display Id and SName of all Shoppe in Nehru Place.
3. To display the Minimum and Maximum Price of each Name of accessories
4. To display the number of shops in each area
5. To display the details of all the accessories in ascending order of accessories names (Name)
6. To display the name of the shop and area in descending order of shop name