



# INDIAN SCHOOL AL WADI AL KABIR

Worksheet, 2024-25

|                                                    |                                   |                                                        |
|----------------------------------------------------|-----------------------------------|--------------------------------------------------------|
| <b>Class: XII</b>                                  | <b>SUB: COMPUTER SCIENCE</b>      | <b>Date of Completion:</b><br><b>10-09-2024</b>        |
| <b>Required to practice these questions in lab</b> | <b>TOPIC: PRACTICAL QUESTIONS</b> | <b>Note: Programs to be written in the record book</b> |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Write an interactive menu driven program to implement a stack. Each node in the stack is storing the information about a Player[Player ID, Player Name, Player Country]. Your program should perform the following operations as per the user's choice <b>1.push () 2. pop () 3. display ()</b> and <b>4. exit ()</b> (Note: take care of Stack is full or Stack is empty)                                                                                            |
| 2 | Write an interactive menu driven program to implement a stack. Each node in the stack is storing the information about a Seminar[Seminar ID, Seminar Topic, City, No_Participants]. Your program should perform the following operations as per the user's choice <b>1.push () 2. pop () 3. display ()</b> and <b>4. exit ()</b> (Note: take care of Stack is full or Stack is empty)                                                                                 |
| 3 | Create a table student in mysql with the fields – rollno, name, subject mark in the database school.<br><br>Write a menu driven program to define the following user defined functions and invoke them<br><br>1. addrec() – To input and add records into a table student in school database with record(rollno, name, subject,mark)<br>2. delrec(rno) - To delete the record with rollno that matches with the rollno that is accepted as parameter to the function. |
| 4 | Write a menu driven program considering the table student, to define the following user defined functions and invoke them<br><br>1. update() – To update the mark of the student with new mark whose rollno is entered by the user.<br>2. display()- To display the record of students whose name is entered by the user.                                                                                                                                             |

5 Create tables GRADUATE and NEWGR, populate the tables as shown below.

**GRADUATE:**

| SNO | NAME    | STIPEND | SUBJECT     | AVERAGE | DIVN |
|-----|---------|---------|-------------|---------|------|
| 1   | Karan   | 400     | Physics     | 68.00   | C    |
| 2   | Divakar | 450     | Comp Sc     | 94.00   | A    |
| 3   | Divya   | 300     | Chemistry   | 86.00   | B    |
| 4   | Sabina  | 500     | Mathematics | 84.00   | B    |
| 5   | John    | 400     | Biology     | 88.00   | B    |

**NEWGR:**

| SNO | SNAME  | PGSUB       |
|-----|--------|-------------|
| 1   | Namita | Medical     |
| 2   | Surya  | Engineering |

*Answer the following by writing valid SQL queries, based on the tables given above:*

- To display the names of those students who have obtained DIVISION B and sort the relation by their NAME.
- To increase the STIPEND by 10% for only those whose AVERAGE is between 86 to 95
- To list the names of those students whose SNO is similar in both the tables.
- To show how many students are present in each DIVISION of graduate table.
- To find the difference between the HIGHEST AVERAGE and LOWEST AVERAGE for those who got DIVISION B.

6 Create the tables COACH and NEWCOACH, populate the table with records as given.

**COACH:**

| COACHID | CNAME   | AGE | SPORTS      | DOA        | PAY  | SEX |
|---------|---------|-----|-------------|------------|------|-----|
| 100     | KUKREJA | 35  | KARATE      | 27/03/2015 | 1000 | M   |
| 200     | RAVINA  | 34  | CRICKET     | 20/01/2017 | 1200 | F   |
| 300     | TARUN   | 33  | BASKET BALL | 01/01/2020 | 2000 | M   |
| 400     | KUSH    | 41  | SWIMMING    | 13/01/2019 | 900  | M   |

|     |         |    |             |            |     |   |
|-----|---------|----|-------------|------------|-----|---|
| 500 | SHAILYA | 37 | BASKET BALL | 19/02/2018 | 750 | F |
| 600 | DAVID   | 32 | CRICKET     | 13/01/2014 | 850 | M |

**NEWCOACH:**

| COACHID | GAME    | FEES |
|---------|---------|------|
| 200     | CRICKET | 3600 |
| 300     | POLO    | 3800 |

*Answer the followings valid SQL commands*

- Display the TOTAL, AVERAGE, LOWEST and HIGHEST pay of all coach.
- Display only those sports where number of coaches are less than 2 in each sport.
- List the COACH NAME, AGE, DOA, SEX and FEES for only those coaches whose game is cricket.
- Show the details of only FEMALE coach of those whose age is below 40, sorted by their PAY.
- Display all those whose name starts with 'S' or 'R' in COACH relation.

7 Create a table ITLAB and NEWLAB populate the following **records** as given below:

**ITLAB**

| NO | Itemname | Cost  | Dop         | Warranty |
|----|----------|-------|-------------|----------|
| 1  | Computer | 20000 | 11/DEC/2000 | 2        |
| 2  | Printer  | 7000  | 11/FEB/2001 | 1        |
| 3  | Scanner  | 5000  | 12/MAR/2001 | 1        |
| 4  | Camera   | 20000 | 01/FEB/2001 | 2        |
| 5  | Plotter  | 12000 | 05/JUN/2004 | 3        |
| 6  | Hub      | 4000  | 09/OCT/2002 | 1        |

**NEWLAB**

| NO | Suppname       | Scharge  |
|----|----------------|----------|
| 4  | JP group       | 10000.99 |
| 5  | Verma and sons | 8900.33  |

|   |                |         |
|---|----------------|---------|
| 6 | Delta services | 9988.44 |
|---|----------------|---------|

Write SQL query for the followings to:

- (i) Display those items whose name contains 'er' or 'ra'.
- (ii) Display all the details of lab items whose COST is in the range of 10000 to 15000.
- (iii) Display only those items whose cost is more than the average cost of the table.
- (iv) Add a new column to hold the NO\_ITEMS.
- (v) Display ITEMNAME, COST and SUPPLIER NAME for only those whose NO is same in both tables.

8 Create table BESTORDERS and NEWORDERS, add the records as shown below.

**BESTORDERS:**

| ORDERNO | CUSTCODE | DOP        | ITEM         | QTY | AMOUNT |
|---------|----------|------------|--------------|-----|--------|
| A010    | C003     | 22-01-2018 | Burger       | 10  | 100    |
| A002    | E003     | 24-01-2019 | Pizza        | 5   | 100    |
| A013    | D001     | 24-02-2017 | Veg roll     | 20  | 50     |
| A004    | C003     | 11-08-2019 | Garlic bread | 7   | 45     |
| A005    | E003     | 02-02-2018 | Burger       | 20  | 250    |

**NEWORDERS:**

| ORDERNO | SUPPLIER  | PRICE  |
|---------|-----------|--------|
| A002    | Milton    | 200.55 |
| A013    | Britannia | 300.55 |

Write SQL statements to perform the followings:

- i) To count the number of items having Burger.
- ii) To display the SUPPLIER NAME and CUSTCODE for only those whose ORDERNO is similar.
- iii) To count number of items whose AMOUNT is more than the AVERAGE AMOUNT of the table.
- iv) Display orderno, custcode and amount of those items whose amount is in the range of 100 to 250.
- v) To remove a column amount from bestorders.