



Spring-2024 DataBase Systems (CS-103)

Lab Task # 06

SQL-Single Rows Function

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### Important Instruction

1. No plagiarism allowed.
2. You will required to submit only soft copy via google classroom
3. Late submission not accepted
4. Rename submission file DB24-Name-RegNo. like: **DB24-hamza-1234**
5. You will required to submit single **pdf**

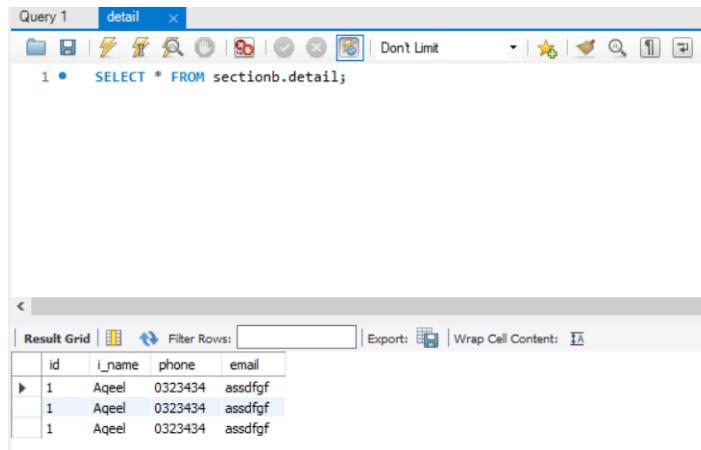
### Submission Example

#### Question .

Write query to select all data from table:

#### Solution

```
SELECT * FROM db.detail;
```



#### Question 1

1. Create a new email, which will contain the first 3 letters of the first name and last name and employee id. Sort the data in ascending order. Do not use Concat Operator ||. See sample output below for additional character strings and formatting.



2. Starting with the string “Oracle Internet Academy”, pad the string to create:  
\*\*\*\*Muslim\*\*\*\*Youth\*\*\*\*University\*\*\*\*
3. How many months between your birthday this year and January 1 next year?
4. What’s the position of “S” in “Internet Service”? Label as Position. Use the string “Internet Service” to produce the following output below. Label this column as The Net. Write your SQL Statement

```

      Position The
-----
              8 net

```

## Question 2

### Library Management System

Given Table are following:

Members: It contains information about the members

Column Name	Data Type	Description
Member_Id	Number(5)	Unique Member ID
Member_Name	Varchar2(30)	Name of the Library member
Member_address	Varchar2(50)	Address of the member
Acc_Open_Date	Date	Date of membership
Membership_type	Varchar2(20)	Type of the membership such as 'Lifetime', 'Annual', 'Half Yearly', 'Quarterly'
Fees_paid	Number(4)	Membership fees paid
Max_Books_Allowed	Number(2)	Total Number of books that can be issued to the member.
Penalty_Amount	Number(7,2)	Penalty amount due

Books: It contains information about the books belongs to the library

Column Name	Data Type	Description
Book_No	Number(6)	Book identification number
Book_Name	VarChar2(30)	Name of the book
Author_name	Varchar2(30)	Author of the book
Cost	Number(7,2)	Cost of the book
Category	Char(10)	Category like Science , Fiction etc.

Issue: It contains the information about issue of the books

Column Name	Data Type	Description
Lib_Issue_Id	Number(10)	Library Book Issue No
Book_No	Number(6)	Number of the book issued
Member_Id	Number(5)	Member that issued the book
Issue_Date	Date	Date of Issue
Return_date	Date	Return date

#### Yout Task

- Create Database library management system.
- create above mention table and insert upto **15** records. **Note: Must use year 2023 as a date in each record like: 01-01-2023**
- List the Issue details for the books that are not returned yet.
- Update all the blank return\_date with 31-Dec-06 excluding last two record of tables.
- List all the Issue details of books issued for more then 30 days.
- List all the members in the descending order of Penalty due on them.
- List all the members whose name starts with 'R' or 'G' and contains letter 'I' in it.
- List the entire book name in Init cap and author in upper case in the descending order of the book name.
- List the Issue Details for all the books issue to member 101 with Issue.date and Return Date in following format. 'Tuesday, July, 10, 2023'
- List all the members that became the member in the year 2023.
- List the Lib.Issue.Id, Issue.Date, Return.Date and No of days Book was issued.
- Display no of months between issue date and return date for all issues
- Display the last day of the month of the issue date.
- Display the month and no of books issued each month in the descending order of count.
- Find the maximum, minimum, total and average penalty amount in the member table.