

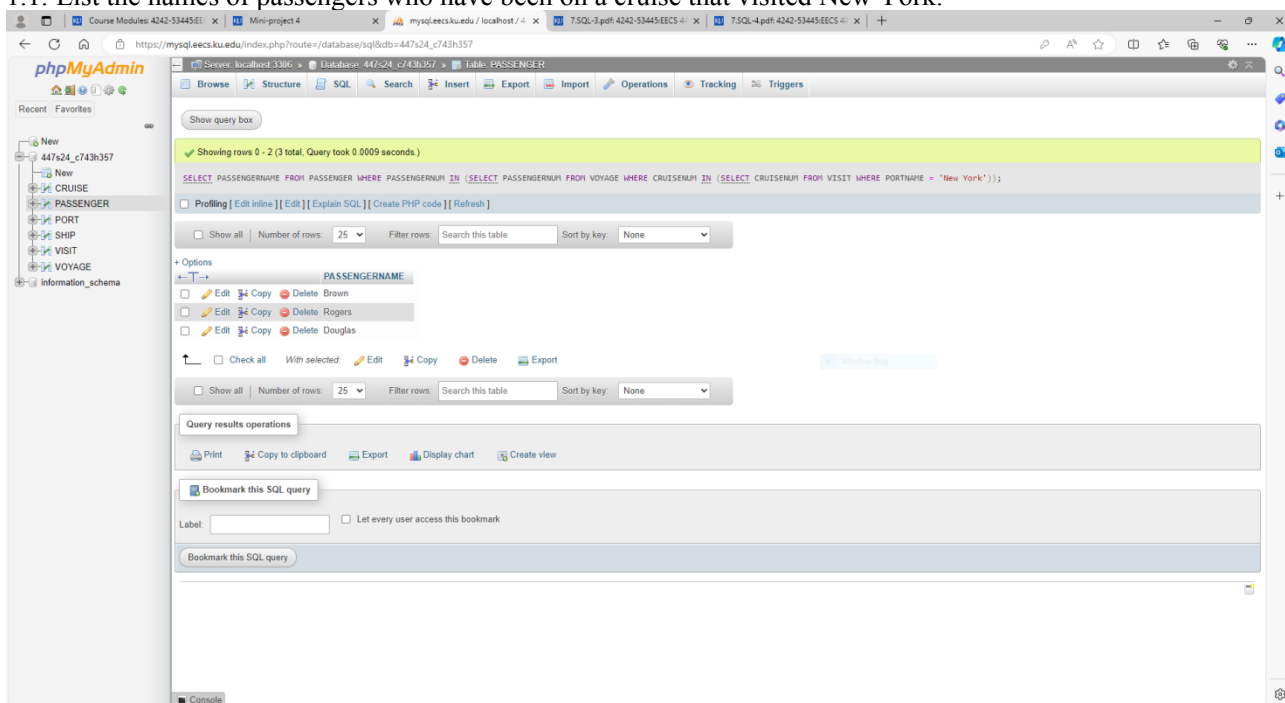
EECS447 Mini-project 4

For each question, **show your SQL query first**. Then, evaluate the query on the cruise tables in MySQL database, **make a screenshot, and paste it here**.

The screenshot must contain the entire HTML page, which has your database name on the left panel.

1. Please **use subquery** in the follow scenarios:

1.1. List the names of passengers who have been on a cruise that visited New York.



1.2. Which ship weighs the least? Do NOT use aggregate functions.

The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is: `SELECT SHIPNAME FROM SHIP WHERE WEIGHT <= ALL (SELECT WEIGHT FROM SHIP);`. The result shows 0 rows, indicating that no ship in the database meets the criteria of being the lightest (since the query is flawed for finding the minimum without aggregate functions).

Query results:

SHIPNAME

2. Please use aggregate functions for the following queries

2.1 What is the average weight of ships built by each builder?

The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is: `SELECT BUILDER, AVG(WEIGHT) AS AVG_WEIGHT FROM SHIP GROUP BY BUILDER;`. The result shows 3 rows, representing the average weight for each builder.

Query results:

BUILDER	AVG_WEIGHT
Ace	59333.3333
Ajax	81000.0000
Master	82500.0000

2.2 Find the name of the passenger who paid the highest fare for a cruise trip.

The screenshot shows the phpMyAdmin web interface. The left sidebar displays the database structure with a tree view containing 'New', '447s24_c743h357', 'CRUISE', 'PASSENGER', 'PORT', 'SHIP', 'VISIT', 'VOYAGE', and 'information_schema'. The main panel is titled 'Table: PASSENGER' and shows a SQL query: `SELECT PASSENGERNAME FROM PASSENGER WHERE PASSENGERID IN (SELECT PASSENGERID FROM VOYAGE WHERE FARE = (SELECT MAX(FARE) FROM VOYAGE));`. The query results section shows 'Showing rows 0 - 1 (2 total. Query took 0.0008 seconds.)'. Below the query, there are options to 'Show all', 'Number of rows: 25', 'Filter rows', and 'Sort by key: None'. The 'Query results operations' section includes 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'. The 'Bookmark this SQL query' section has a 'Label' field and a checkbox 'Let every user access this bookmark'.

phpMyAdmin

Server: localhost:3306 Database: 447s24_c743h357 Table: PASSENGER

Show query box

Showing rows 0 - 1 (2 total. Query took 0.0008 seconds.)

`SELECT PASSENGERNAME FROM PASSENGER WHERE PASSENGERID IN (SELECT PASSENGERID FROM VOYAGE WHERE FARE = (SELECT MAX(FARE) FROM VOYAGE));`

☐ Profiling [\[Edit inline \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

[PASSENGERNAME](#)

☐ Edit [Copy](#) [Delete](#) [Brown](#)

☐ Edit [Copy](#) [Delete](#) [Smith](#)

☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Bookmark this SQL query

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Console