

# CMSE514 - Web Technologies and Services

## Database Assignment

Using any SQL Compiler (such as <https://www.programiz.com/sql/online-compiler/>), create the following tables and queries:

1. Create the following tables; you may use CREATE, etc. for this purpose.

### *Employee*

<b>EmpID</b>	<b>Name</b>	<b>Rank</b>	<b>Age</b>
123	Alex Holmes	5	55
124	Mehmet Ali	1	23
125	Paul Dee	2	32
126	Nana Ibrahim	4	72
127	Can Adnan	2	45
128	Selin Adam	3	36
129	Steph Curry	4	45

### *Schedule*

<b>SNID</b>	<b>Work</b>	<b>Staff</b>	<b>Hours</b>
1	Pastry	124	10
2	Paper work	123	15
3	Packaging	128	22
4	Pastry	129	8
5	Paper work	123	5
6	Packaging	125	10
7	Pastry	129	15
8	Packaging	124	5
9	Paper work	126	7
10	Others	127	12
11	Packaging	128	10
12	Paper work	126	5

***Rate***

<b>Work_ID</b>	<b>Work</b>	<b>Rate</b>
1000	Pastry	200
1001	Paper work	500
1002	Packaging	150
1003	Others	300

2. Write queries to perform the following tasks and show the output in each case.
  - a) Write a query to show the names of employees older than 40 years.
  - b) Write a query to show the names and age of employees older than 40 years.
  - c) Write a query to show the different types of work available on Schedule table and count their occurrence on the table.
  - d) Write a query to join the tables Employees and Schedule using the IDs.
  - e) Write a query to join the tables Rate and Schedule.
  - f) Write a query to join tables Employees and Schedule, then calculate the total amount for each SNID.
  - g) Update Selin's age to 49.
  - h) Add a new work for employee 123 in the schedule table with the information: where work name is Others, and the number of hours is 22.
  
3. If the employer decides to switch to MongoDB for the database, what would the records for Paul Dee and Nana Ibrahim look like?