Skills for Hire
Data Analytics
Assignment 1 - SQL

Deadline: See Slack Post.

Maximum Assignment Credits: 30

Instructions:

- Run the following queries on https://www.w3schools.com/sql/trysql.asp?filename=trysql_asc OR https://www.programiz.com/sql/online-compiler/
  (*You may choose any other editor or software of your choice*)
- **Take a clear screenshot containing the query executed and output. (Only output screenshots will not be accepted). Copy your query and screenshot and paste it into word.**
- Save the word file as a **pdf** and name it **DA_Group_Assignment1_FirstName_LastName**

1. SQL Queries (20 Credits)

   i. Create a Table **EMPLOYEE** to store employee details as shown below (1)

empno	ename	job	mgr	hiredate	sal	comm	deptno
8369	SMITH	CLERK	8902	1990-12-18	800.00	NULL	20
8499	ANYA	SALESMAN	8698	1991-02-20	1600.00	300.00	30
8521	SETH	SALESMAN	8698	1991-02-22	1250.00	500.00	30
8566	MAHADEVAN	MANAGER	8839	1991-04-02	2985.00	NULL	20
8654	MOMIN	SALESMAN	8698	1991-09-28	1250.00	1400.00	30
8698	BINA	MANAGER	8839	1991-05-01	2850.00	NULL	30
8882	SHIVANSH	MANAGER	8839	1991-06-09	2450.00	NULL	10
8888	SCOTT	ANALYST	8566	1992-12-09	3000.00	NULL	20
8839	AMIR	PRESIDENT	NULL	1991-11-18	5000.00	NULL	10
8844	KULDEEP	SALESMAN	8698	1991-09-08	1500.00	0.00	30

   ii. Write statements for the following queries based on the table above:

   a. Assign one column of your choice as the primary key. (1)
   b. Display the **EMPLOYEE** table structure. (1)
   c. Display all the records the from **EMPLOYEE** table. (1)
   d. To display **ename** and **sal** of employees whose salaries are greater than or equal to 2200. (2)
   e. To display all details of employees who are not getting commission. (2)
   f. To display employee name and salary of those employees **who don't have** their salary in range of 2500 to 4000. (2)
   g. To display the name, job title and salary of employees who don't have a manager. (2)
   h. To display the name of employee whose name contains "A" as third alphabet. (2)
   i. To display the name of employee whose name contains "T" as last alphabet. (2)
   j. To display the name of employee whose name contains" M" as First and "L" as third alphabet. (2)
   k. There has been an error, input the correct salary for Scott to 5000. (1)
   l. Display only the types of job. List them only once (1)

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2. Joins (5 Credits)

i. Create the following tables and name them **student** and **project** respectively. (1)

STUDENT

Stdid	Fname	Lname	credits	Dept	Gender
100	Mary	Cooper	6000	Drama	F
101	Mike	Carpen	5000	Maths	M
102	Ryan	Smith	10000	Drama	M
103	Tom	Randall	4800	Maths	M
104	Ashley	Brown	5000	Science	F

PROJECT

Projected	Stdid	Projectname
1	100	Shakespeare
2	100	Greek Tragedy
3	100	Disaster
4	101	Trigonometry
5	102	Wizard of Oz
6	102	Creative dramatics
7	102	Modern Art
8	106	Natural Language Processing
9	104	Gravity

ii. Write QUERIES for the following statements based on the tables above:

a. Get name, project name order by firstname from "student" and "project" for all students who have project assigned to them. (1)
b. Get name, project name order by lastname from "student" and "project" for all students who **do not have** a project assigned to them. (1)
c. Get all project name even if they **do not have** any matching stdid, order by firstname. (1)
d. Get complete records from both tables. (1)

3. Assume you have the data schema as follows: (No need to create a table on the online compiler)

- *Student (ID, NAME, SUBJECT, AVERAGE, DIV, CREDITS)*
- *Teacher (SUBJECT, PNAME,)* (5 Credits)

Write the following queries:

a. Display the student, professor name and the subject. (1)
b. Display all the student and professor name who are offering subjects Maths and Science. (2)
c. Correct the following query if you find any errors (2)

```
Select NAME from Student where CREDITS = null;
Select NAME, CREDITS From Student where CREDITS BETWEEN 10 AND 20;
```