**SQL ASSIGNMENT**

--TASK 1

/\*Have a view of all the columns in the table; Rename mispelt column\*/

SELECT column\_name, data\_type

FROM information\_schema.columns

WHERE table\_name = 'records\_may21';

ALTER TABLE records\_may21

RENAME compani\_name TO company\_name;

--TASK 2

/\*How many rows does the data have?\*/

SELECT

COUNT(\*) AS total\_rows

FROM records\_may21;--There are 1800 rows in the dataset

--TASK 3

/\*There is a record that was wrongly entered. It is the record of a CEO that is late. The record\_id is 430.

Please, remove this record from the table.\*/

DELETE FROM records\_may21

WHERE "record\_id" = 430;

--TASK 4

/\*There is a record that wasn’t entered. Please, help insert it into the table. The fields are as follows:

record\_id 430

date 2020-10-31

ceo\_id 1012

first\_name David

last\_name Wells

date\_of\_birth 1977-09-19

total\_revenue 495.71

total\_expenses 202.0

state Florida

postal\_codes 13888

compani\_name Adams-Rice

industry Financial

email david.wells@Adams.io

\*/

INSERT INTO records\_may21

VALUES ('430',

'2020-10-31',

'1012',

'David',

'Wells',

'1977-09-19',

'495.71',

'202.0',

'Florida',

'13888',

'Adams-Rice',

'Financial',

'david.wells@Adams.io');

--SELECT \* FROM records\_may21 WHERE "record\_id" = 430

--TASK 5

/\*A CEO’s company’s state was mistakenly omitted (has Null value) for records associated with it.

Please, fill these state name with “Texas”. \*/

SELECT \* FROM records\_may21 WHERE "state" ='Texas';

UPDATE records\_may21

SET "state" = 'Texas'

WHERE "ceo\_id" = 1017;

--TASK 6

/\*Display the unique states in the data.\*/

SELECT DISTINCT state

FROM records\_may21;

--TASK 7

/\*The state “New York” was misspelt as “New Yoke” in the dataset. Correct this in the dataset.\*/

UPDATE records\_may21

SET "state" = 'New York'

WHERE "state" = 'New Yoke';

--TASK 8

/\*Assuming the profit is total revenue – total expenses, find the total profit made by all companies in the 3 years.\*/

SELECT company\_name, SUM(total\_revenue-total\_expenses) AS profit

FROM records\_may21

GROUP BY 1

ORDER BY 2 ASC;

--TASK 9

/\*Find the company with the lowest profit in the 3 years.\*/

--"Johnson, Olson and Smith" is the company with the lowest profit (see Task 8 above)

--TASK 10

/\*Find the state where the highest mean profit was generated in the 3 years.\*/

SELECT state, AVG(total\_revenue-total\_expenses) AS mean\_profit

FROM records\_may21

GROUP BY 1

ORDER BY 2 DESC;--New York is the state with the highest mean profit generated in the 3 yrs

--TASK 11

/\*Who is the youngest CEO? (display his/her first name, last name, ceo\_id, and date of birth).\*/

SELECT DISTINCT first\_name, last\_name, ceo\_id, date\_of\_birth

FROM records\_may21

ORDER BY 4 DESC;--Marcus Burgess is the youngest CEO

--TASK 12

/\*Find the CEO(s) whose company are in the IT industry and in California State.

(Return only the CEO’s first name).\*/

SELECT DISTINCT first\_name, industry, state

FROM records\_may21

WHERE industry = 'IT' AND state = 'California'

ORDER BY 3;

--TASK 13:

/\*Find the postal code in New York with the highest revenue.\*/

SELECT postal\_codes, state, MAX(total\_revenue) AS Max\_TotalRev

FROM records\_may21

WHERE state = 'New York'

GROUP BY 1, 2

ORDER BY 3 DESC;--Postal Code '90626' has the highest revenue

--TASK 14:

/\*How many CEO’s email address have a top level domain (last four characters) as .com?\*/

SELECT COUNT(email) AS email\_count

FROM records\_may21

WHERE email LIKE '%.com'; --486 CEO's email addresses have top level domain

--TASK 15:

/\*Which first name(s) is bore by most number of CEOs?\*/

SELECT first\_name, COUNT(first\_name) AS total\_count

FROM records\_may21

GROUP BY 1

ORDER BY 2 DESC;--Melissa and David are the 1st names borne by most number of CEOs