Project 2: Bob Ross

Make a series of queries that meet the following requirements. Write a paragraph about each one including a general overview of the process (i.e. talk about functions in sql), the expected result, the actual query, and a screenshot of the result.

1. Set Operations: Set Operators are used to combine information from one or more tables, with the most common Set Operators being Union, Union all, Intersect, and Minus. The Union operator will return the combined outputs of two or more queries into single rows and columns being different. Union All is is much like Union except that it will not include any duplicates. Intersect is used to display information that is common on both tables, however, the number of columns must be the same. The Minus operator is used to retrieve information of one table that is not in another table.

SELECT title, conifer

FROM bobross.bobross

WHERE CONIFER BETWEEN 1 AND 20

EXCEPT

SELECT title, conifer

FROM bobross.bobross

WHERE CONIFER between 10 AND 12;

Row Count: 212

1. Subqueries: A subquery is simply a Query that is nested inside another Query. The Subquery my be inside a SELECT, FROM, or WHERE clause.

SELECT TITLE,

BRIDGE,

(SELECT SUM(BRIDGE)

FROM bobross.bobross) AS AverageBridgeDrawings

FROM bobross.bobross;

Row Count: 403

1. Order of operation of queries: Much like Math, the order of operations of queries defines the order which the clauses of a query are executed. This order is: From, Where, Group By, Having, Select, Order by, and Limit.

SELECT count(\*) FROM bobross.bobross

WHERE BRIDGE = "1"

GROUP BY EPISODE

Row Count: 7

1. Creating, altering, and dropping tables: This one is pretty self explanatory. Creating a table is used to create a new table, altering a table is used to add, delete, or modify columns in a table, and dropping a table will delete the whole table

ALTER TABLE bobross.bobross

DROP COLUMN TITLE;

ALTER TABLE bobross.bobross

ADD EPISODE\_AIR\_DATE;

ALTER TABLE bobross.bobross

DROP COLUMN EPISODE\_AIR\_DATE;

1. Associations: An association defines a relationship between two object based on common attributes. The association allows entity object to access and use the data of the other entity’s objects through reference
2. Joins and multiple table joins: JOIN comb ines records from two different tables. There are Inner Join(same as just ‘JOIN’), FULL JOIN, LEFT JOIN, and RIGHT JOIN. JOIN will select records with matching values in the tables. LEFT JOIN will select records from the first table with matching records on the right table. RIGHT JOIN will select records from the second table with match records on the first table. FULL JOIN will select all records that match either the left or the right tables.

SELECT EPISODE TITLE

FROM bobross.bobross JOIN avengers.avengers

ON EPISODE\_NAMES = EPISODE\_NAMES