**TOP SQL QUESTIONS**

**PART 2**

* **Find top 5 most revenue earning products?**
* **Give list of products from electronics or mobile category earning revenuein the range of 200000 to 500000?**
* **What are Constraints?**
* **What are the different types of Constraints?**

* **Find top 5 most revenue earning products?**

**CREATE TABLE PRODUCTS**

**(**

**PRODUCT\_ID INT,**

**PRODUCT\_CATEGORY VARCHAR (40),**

**PRODUCT\_NAME VARCHAR (40),**

**Revenue INT**

**);**

**INSERT INTO PRODUCTS VALUES (1, 'FURNITURE','CHAIR', 6000),**

**(2,'ELECTRONICS','FAN',80000),**

**(3,'BEAUTY','SHAMPOO', 20000),**

**(4,'FASHION','T-SHIRT',30000),**

**(5,'GROCERIES','FRUITS',40000),**

**(6,'MOBILE','SAMSUNG',300000),**

**(7,'BEAUTY','SOAP', 50000),**

**(8,'FASHION','JEANS',250000),**

**(9,'GROCERIES','DAIRY',40000),**

**(10,'MOBILE','APPLE',500000),**

**(11,'GROCERIES','SNACKS',7500),**

**(12,'ELECTRONICS','LIGHTS',100000),**

**(13, 'FURNITURE','TABLE', 45000),**

**(14,'MOBILE','MOTOROLA',200000),**

**(15,'GROCERIES','BREAD',40000),**

**(16,'ELECTRONICS','MIXER',150000),**

**(17,'MOBILE','LENOVO',200000),**

**(18, 'FURNITURE','SOFA', 40000),**

**(19,'FASHION','BAG',25000),**

**(20,'ELECTRONICS','TV',200000);**

**SELECT \* FROM PRODUCTS;**

**---------------------------------------------------**

**TOP 5 RVENUE EARNING PRODUCTS;**

**SELECT \* FROM PRODUCTS ORDER BY REVENUE DESC LIMIT 5;**

**SELECT \*, RANK () OVER (ORDER BY REVENUE DESC) AS TOP\_SELLING\_PRODUCTS FROM PRODUCTS;**

**SELECT \*, DENSE\_RANK () OVER (ORDER BY REVENUE DESC) AS TOP\_SELLING\_PRODUCTS FROM PRODUCTS;**

**SELECT \* FROM (**

**SELECT \*, DENSE\_RANK () OVER (ORDER BY REVENUE DESC) AS TOP5\_REVENUE\_PRODUCTS FROM PRODUCTS) AS TEMP**

**WHERE TOP5\_REVENUE\_PRODUCTS <=5;**

* **Give list of products from electronics or mobile category earning revenue in the range of 200000 to 500000?**

**CREATE TABLE PRODUCTS**

**(**

**PRODUCT\_ID INT,**

**PRODUCT\_CATEGORY VARCHAR(40),**

**PRODUCT\_NAME VARCHAR(40),**

**Revenue INT**

**);**

**INSERT INTO PRODUCTS VALUES (1, 'FURNITURE','CHAIR', 6000),**

**(2,'ELECTRONICS','FAN',80000),**

**(3,'BEAUTY','SHAMPOO', 20000),**

**(4,'FASHION','T-SHIRT',30000),**

**(5,'GROCERIES','FRUITS',40000),**

**(6,'MOBILE','SAMSUNG',300000),**

**(7,'BEAUTY','SOAP', 50000),**

**(8,'FASHION','JEANS',250000),**

**(9,'GROCERIES','DAIRY',40000),**

**(10,'MOBILE','APPLE',500000),**

**(11,'GROCERIES','SNACKS',7500),**

**(12,'ELECTRONICS','LIGHTS',100000),**

**(13, 'FURNITURE','TABLE', 45000),**

**(14,'MOBILE','MOTOROLA',200000),**

**(15,'GROCERIES','BREAD',40000),**

**(16,'ELECTRONICS','MIXER',150000),**

**(17,'MOBILE','LENOVO',200000),**

**(18, 'FURNITURE','SOFA', 40000),**

**(19,'FASHION','BAG',25000),**

**(20,'ELECTRONICS','TV',200000);**

**SELECT \* FROM PRODUCTS;**

**/\*-----------FIND PRODUCT\_CATEGORY EITHER ELECTRONICS OR MOBILE--------------\*/**

**SELECT PRODUCT\_CATEGORY, PRODUCT\_NAME, REVENUE FROM PRODUCTS**

**WHERE PRODUCT\_CATEGORY IN ('ELECTRONICS','MOBILE');**

**/\*----------REVENUE RANGE 200000 TO 500000-------------\*/**

**SELECT PRODUCT\_CATEGORY, PRODUCT\_NAME, REVENUE FROM PRODUCTS**

**WHERE REVENUE BETWEEN 200000 AND 500000;**

**SELECT PRODUCT\_CATEGORY, PRODUCT\_NAME, REVENUE FROM PRODUCTS**

**WHERE PRODUCT\_CATEGORY IN ('ELECTRONICS','MOBILE')**

**AND**

**REVENUE BETWEEN 200000 AND 500000;**

* **What are Constraints?**
* **What are the different types of Constraints?**

**CREATE TABLE EMPLOYEE (**

**EMP\_ID INT PRIMARY KEY,**

**EMP\_NAME VARCHAR (40) NOT NULL,**

**EMP\_DEPT VARCHAR (40) UNIQUE,**

**EMP\_AGE INT CHECK (EMP\_AGE>18),**

**EMP\_SALARY INT DEFAULT 20000);**

**SELECT \* FROM EMPLOYEE;**

**------------------NOT NULL -------------------------------**

**INSERT INTO EMPLOYEE VALUES (1,'A', 'SALES',30,40000);**

**SELECT \* FROM EMPLOYEE;**

**INSERT INTO EMPLOYEE VALUES (1, NULL, 'SALES',30,40000);**

**------------------UNIQUE-------------------------------**

**INSERT INTO EMPLOYEE VALUES (3,'A', 'SALES',30,40000);**

**SELECT \* FROM EMPLOYEE;**

**INSERT INTO EMPLOYEE VALUES (3,'A', 'ANALYST',30,40000);**

**-------------PRIMARY KEY----------------------------**

**INSERT INTO EMPLOYEE VALUES (3,'A', 'ADMIN',32,50000);**

**INSERT INTO EMPLOYEE VALUES (4,'A', 'ADMIN',32,50000);**

**SELECT \* FROM EMPLOYEE;**

**INSERT INTO EMPLOYEE VALUES (NULL, 'B', 'R&D',30,60000);**

**INSERT INTO EMPLOYEE VALUES (5, 'B', 'R&D',30,60000);**

**--------------CHECK ------------------------------------**

**INSERT INTO EMPLOYEE VALUES (6,'P', 'HR',16,40000);**

**INSERT INTO EMPLOYEE VALUES (6,'P', 'HR',20,40000);**

**SELECT \* FROM EMPLOYEE;**

**--------------DEFAULT-----------------------------------**

**INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, EMP\_DEPT,EMP\_AGE) VALUES(7,'P','Finance',40);**

**SELECT \* FROM EMPLOYEE;**

**-------------------------------------------------------------------------------------------**

**DROP TABLE EMPLOYEE1;**

**CREATE TABLE EMPLOYEE1(**

**EMP\_ID INT,**

**EMP\_NAME VARCHAR (40),**

**EMP\_DEPT VARCHAR (40),**

**EMP\_AGE INT,**

**EMP\_SALARY INT);**

**SELECT \* FROM EMPLOYEE1;**

**----------------------------------------------------------------------------------------------------**

**ALTER TABLE EMPLOYEE1**

**ADD CONSTRAINT PRIMARY\_CONSTRAINT PRIMARY KEY(EMP\_ID);**

**ALTER TABLE EMPLOYEE1**

**ADD CONSTRAINT UNIQUE\_CONSTRAINT UNIQUE (EMP\_DEPT);**

**DESCRIBE EMPLOYEE1;**

**-------------------------------------------------------------------------**

**---------------------DROP CONSTRAINT -----------------------------**

**ALTER TABLE EMPLOYEE1**

**DROP CONSTRAINT UNIQUE\_CONSTRAINT;**

**DESCRIBE EMPLOYEE1;**

**--------------------------------------------------------------------------------**

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