

DBS LAB END EXAM

Create the following Vehicle Service database which store the different parts details and parts used in the service of different customer vehicles:

Schema:

Part(PartNo, PartName, VehicleType, UnitPrice, SalesPrice)

Service(ServiceNo, PartNo, ServiceDate, CustomerNo, Qty)

Constraints: i. Vehicle Type should be 'V1', 'V2', 'V3', 'V4', or 'V5'

ii. UnitPrice and SalesPrice should be greater than zero

iii. PartNo, FK in Service refers to PartNo, PK in Part

Data:

Part					Service				
1	P1	V1	10	12	1	1	01-Jan-17	C1	5
2	P2	V2	100	110	1	3	01-Jan-17	C1	4
3	P3	V1	150	175	2	3	05-Feb-18	C2	10
4	P4	V3	200	250	3	1	15-May-18	C3	9
5	P5	V2	75	90	4	1	03-Jun-19	C1	5

(Table creation with given constraints is 3 marks and inserting values is 1mark =4M)

A. Write the following queries in SQL:

- List the Part Names which are not used to service the vehicle of any customer. (2M)
- List the customer number who has got his vehicle serviced maximum number of times. (4M)
- List the customer number whose vehicle service used all the parts of vehicle type V1. (2M)

B. Write a PL/SQL program to find the total profit done in the sales of a given part number in the service of different customer vehicles. Raise an exception for invalid part number. (8M)