Name: Deepankar Mali

BIKE DEALERSHIP DATABASE

-Project for SQL Module

Description:

The following database is designed to store, maintain and access sales data of the dealership and the customers

By storing data in a relational database, all the tasks related to daily functioning of the business can be performed easily and much more efficiently. Some of the benefits of using this system to store data over traditional ways are as follows:

1. Reduces the amount of time you spend managing data
2. Easier to analyze data in a variety of ways
3. Promote a disciplined approach to data management
4. Turn disparate information into a valuable resource
5. Improve the quality and consistency of information
6. Find out if a customer is making repeated purchases

This Database consists of 5 tables

1. SALESMAN
2. BIKES
3. CUSTOMERS
4. FINANCE
5. SALES DETAILS

Name: Deepankar Mali

TABLE DESCRIPTIONS

1. SALESMAN

Field	Type	Null	Key	Default	Extra
SalesmanNo	varchar(6)	NO	PRI	*NULL*	
Name	varchar(30)	YES		*NULL*	
ContactNo	bigint(20)	YES		*NULL*	
Email	varchar(30)	YES		*NULL*	
Salesmanage	int(11)	YES		*NULL*	
Salary	double	YES		*NULL*	

2. BIKES

Field	Type	Null	Key	Default	Extra
BikeID	varchar(10)	NO	PRI	*NULL*	
Brand	varchar(30)	YES		*NULL*	
Model	varchar(30)	YES		*NULL*	
Price	double	YES		*NULL*	
Warranty	varchar(20)	YES		*NULL*	
BodyType	varchar(30)	YES		*NULL*	

3. CUSTOMERS

Field	Type	Null	Key	Default	Extra
C_id	varchar(6)	NO	PRI	*NULL*	
CName	varchar(30)	YES		*NULL*	
ContactNo	bigint(20)	NO		*NULL*	
CLocation	varchar(30)	YES		*NULL*	

4. FINANCE

Field	Type	Null	Key	Default	Extra
PaymentID	varchar(7)	NO	PRI	*NULL*	
PaymentType	varchar(10)	YES		*NULL*	
PaymentStatus	varchar(10)	YES		*NULL*	

5. SALES DETAILS

Field	Type	Null	Key	Default	Extra
S_ID	int(11)	NO	PRI	*NULL*	auto_increment
C_id	varchar(10)	YES	MUL	*NULL*	
BikeID	varchar(10)	YES	MUL	*NULL*	
BikeDelivered	varchar(1)	YES		*NULL*	
RC_issued	varchar(1)	YES		N	
SalesmanAssigned	varchar(10)	YES	MUL	*NULL*	
PaymentID	varchar(10)	YES	MUL	*NULL*	

Name: Deepankar Mali

QUERIES

CREATING TABLES WITH CONSTRAINTS AND INSERTING VALUES INTO THEM

BIKES TABLE

```
create table Bikes(BikeID varchar(10) PRIMARY KEY check (BikeID like 'B-___'),
                   Brand varchar(30) check (char_length(Brand)>=1),
                   Model varchar(30),
                   Price double,
                   Warranty varchar(20) check (Warranty="2 years" or
                                               Warranty="3 years" or
                                               Warranty="5 years"),
                   BodyType varchar(30));

```

```
insert into Bikes values("B-101", "Royal Enfield", "Classic 350", 252458.64, "3 years", "Cruiser"),
                         ("B-102", "Royal Enfield", "Hunter 350", 191549.16, "3 years", "Cruiser"),
                         ("B-103", "Royal Enfield", "Bullet 350", 188496.48, "3 years", "Cruiser"),
                         ("B-104", "TVS", "Ronin", 176165.51, "5 years", "Cruiser"),
                         ("B-105", "Honda", "Highness CB350", 252648.46, "5 years", "Cruiser"),
                         ("B-106", "Hero", "Splendor Plus", 91505.79, "3 years", "Commuter"),
                         ("B-108", "Bajaj", "Pulsar 150", 163468.56, "5 years", "Commuter"),
                         ("B-109", "Yamaha", "MT 15 V2", 191679.17,  "2 years", "Sports"),
                         ("B-111", "TVS", "Raider", 115497.48, "3 years", "Sports"),
                         ("B-112", "Bajaj", "Pulsar NS200", 167567.24, "2 years", "Sports"),
                         ("B-113", "Kawasaki", "Ninja H2", 8852461.79, "5 years", "Super"),
                         ("B-114", "Suzuki", "Hayabusa", 1832479.54, "5 years", "Super"),
                         ("B-115", "BMW", "G 310 GS", 354658.45, "3 years", "Cruiser"),
                         ("B-116", "KTM", "390 Adventure", 393856.54, "3 years", "Cruiser");

```

Name: Deepankar Mali

SALESMAN TABLE

```
create table salesman(SalesmanNo varchar(6) PRIMARY KEY check (SalesmanNo like 'SN-___'),
                      Name varchar(30),
                      ContactNo bigint,
                      Email varchar(30),
                      Salesmanage int,
                      Salary double);

```

```
insert into salesman values("SN-101", "Aditya Patil", 9845795254, "adityapatil@gmail.com", 31, 45456.56),
                           ("SN-102", "Darsh Varma", 7984589164, "darshvarma@gmail.com", 34, 36574.46),
                           ("SN-103", "Artha Chowdary", 7825456724, "arthachowdary@gmail.com", 36, 36879.46),
                           ("SN-104", "Raghav Lal", 9854762145, "raghavlal@gmail.com", 24, 41574.91),
                           ("SN-105", "Ashwin Joshi", 9123794679, "ashwinjoshi@gmail.com", 37, 43156.48),
                           ("SN-106", "Ravi Kapadia", 9764857931, "ravikapadia@gmail.com", 28, 36789.14);

```

CUSTOMERS

```
create table customers(C_id varchar(6) primary key check (C_id like 'C-___'),
                       CName varchar(30),
                       ContactNo bigint not null,
                       CLocation varchar(30));

```

```
insert into customers values("C-101", "Raj Koli", 9856478513, "Jasai"),
                             ("C-102", "Omkar Kumar", 9487564896, "Vashi"),
                             ("C-103", "Jay Pawar", 7589468234, "Nerul"),
                             ("C-104", "Harsh Kapoor", 9865478513, "Panvel"),
                             ("C-105", "Arun Patil", 7864986153, "Bhiwandi"),
                             ("C-106", "Omkar Thali", 9846157623, "Dahisar"),
                             ("C-107", "Om Prakash", 7984197645, "Vashi"),
                             ("C-108", "Jayesh Thali", 7954286428, "Jasai"),
                             ("C-109", "Deepankar Mali", 7518945637, "Jasai"),
                             ("C-110", "Priyash Patil", 9876454654, "Nerul");

```

Name: Deepankar Mali

FINANCE

```
create table Finance(PaymentID varchar(7) PRIMARY KEY check (PaymentID like 'Pid-___'),
                     PaymentType varchar(10) check (PaymentType="Cash" or PaymentType="Cheque" or
                                                    PaymentType="Card" or PaymentType="Online"),
                     PaymentStatus varchar(10) check (PaymentStatus="Full" or PaymentStatus="Partial"));
#
```

```
insert into Finance values("Pid-101", "Cheque", "Full"),
                           ("Pid-102", "Cash", "Full"),
                           ("Pid-103", "Cash", "Partial"),
                           ("Pid-104", "Online", "Partial"),
                           ("Pid-105", "Card", "Partial"),
                           ("Pid-106", "Card", "Full");

```

SALES DETAILS

```
drop table sales_details;
create table Sales_Details(S_ID int PRIMARY KEY AUTO_INCREMENT,
                        C_id varchar(10), FOREIGN KEY(C_id) REFERENCES customers(C_id),
                        BikeID varchar(10), FOREIGN KEY(BikeID) REFERENCES bikes(BikeID),
                        BikeDelivered varchar(1) check (BikeDelivered="Y" or BikeDelivered="N"),
                        RC_issued varchar(1) DEFAULT 'N' check (RC_issued="Y" or RC_issued="N"),
                        SalesmanAssigned varchar(10), FOREIGN KEY(SalesmanAssigned) REFERENCES salesman(SalesmanNo),
                        PaymentID varchar(10), FOREIGN KEY(PaymentID) REFERENCES finance(PaymentID));

```

```
insert into sales_details values(101, "C-108", "B-105", "Y", "Y", "SN-102", "Pid-101"),
                                 (102, "C-102", "B-108", "Y", "N", "SN-106", "Pid-104"),
                                 (103, "C-104", "B-101", "N", "N", "SN-101", "Pid-103"),
                                 (104, "C-107", "B-115", "Y", "N", "SN-103", "Pid-106"),
                                 (105, "C-109", "B-105", "Y", "Y", "SN-102", "Pid-102"),
                                 (106, "C-101", "B-116", "N", "N", "SN-104", "Pid-105");

```

Name: Deepankar Mali

SQL Queries:

Show Name and Price of all the Sports vehicles

```
90 select Brand, Model, Price from bikes where BodyType="Sports";
91
```

Brand	Model	Price
Yamaha	MT 15 V2	191679.17
TVS	Raider	115497.48
Bajaj	Pulsar NS200	167567.24

Show Bikes with the Price Range below 2 lakhs

```
92 #Show Only the Bikes with the price range below 2 lakhs
93 select * from bikes where Price<200000;
94
```

BikeID	Brand	Model	Price	Warranty	BodyType
B-102	Royal Enfield	Hunter 350	191549.16	3 years	Cruiser
B-103	Royal Enfield	Bullet 350	188496.48	3 years	Cruiser
B-104	TVS	Ronin	176165.51	5 years	Cruiser
B-106	Hero	Splendor Plus	91505.79	3 years	Commuter
B-108	Bajaj	Pulsar 150	163468.56	5 years	Commuter
B-109	Yamaha	MT 15 V2	191679.17	2 years	Sports
B-111	TVS	Raider	115497.48	3 years	Sports
B-112	Bajaj	Pulsar NS200	167567.24	2 years	Sports

Show Bikes with Price below the average

```
112 select * from bikes where Price<(select avg(Price) from bikes);
113
```

BikeID	Brand	Model	Price	Warranty	BodyType
B-101	Royal Enfield	Classic 350	252458.64	3 years	Cruiser
B-102	Royal Enfield	Hunter 350	191549.16	3 years	Cruiser
B-103	Royal Enfield	Bullet 350	188496.48	3 years	Cruiser
B-104	TVS	Ronin	176165.51	5 years	Cruiser
B-105	Honda	Highness CB350	252648.46	5 years	Cruiser
B-106	Hero	Splendor Plus	91505.79	3 years	Commuter
B-108	Bajaj	Pulsar 150	163468.56	5 years	Commuter
B-109	Yamaha	MT 15 V2	191679.17	2 years	Sports
B-111	TVS	Raider	115497.48	3 years	Sports
B-112	Bajaj	Pulsar NS200	167567.24	2 years	Sports
B-115	BMW	G 310 GS	354658.45	3 years	Cruiser
B-116	KTM	390 Adventure	393856.54	3 years	Cruiser

Show Customer Name and ID along with their Payment Status

```
95 #Show Customer Name and ID along with their Payment Status
96 select customers.C_id, customers.Cname, PaymentStatus from customers, finance, sales_details
97 where sales_details.C_id=customers.C_id and sales_details.PaymentID=finance.PaymentID;
98
```

C_id	Cname	PaymentStatus
C-108	Jayesh Thali	Full
C-102	Omkar Kumar	Partial
C-104	Harsh Kapoor	Partial
C-107	Om Prakash	Full
C-109	Deepankar Mali	Full
C-101	Raj Koli	Partial

Show Customer ID and Name who bought Cruiser Bikes

```
 99 #Show Customer ID and Name who bought cruiser bikes
100 select customers.C_id, customers.CName, bikes.bikeID from customers, sales_details, bikes
101 where sales_details.BikeID=bikes.BikeID and sales_details.C_id=customers.C_id
102 and BodyType="Cruiser";
103
```

C_id	CName	BodyType
C-108	Jayesh Thali	Cruiser
C-104	Harsh Kapoor	Cruiser
C-107	Om Prakash	Cruiser
C-109	Deepankar Mali	Cruiser
C-101	Raj Koli	Cruiser

Creating a view combing all five tables

```
104 Create view Customer_Sales as
105 select customers.C_Id, customers.Cname, bikes.Brand, bikes.Model, PaymentStatus,
106 salesman.Name as Salesman_Assigned
107 from customers, bikes, finance, salesman, sales_Details
108 where sales_details.c_id=customers.C_id and sales_details.PaymentID=finance.PaymentID
109 and sales_Details.BikeID=bikes.BikeID and sales_details.SalesmanAssigned=salesman.SalesmanNo;
110
```

C_Id	Cname	Brand	Model	PaymentStatus	Salesman_Assigned
C-108	Jayesh Thali	Honda	Highness CB350	Full	Darsh Varma
C-102	Omkar Kumar	Bajaj	Pulsar 150	Partial	Ravi Kapadia
C-104	Harsh Kapoor	Royal Enfield	Classic 350	Partial	Aditya Patil
C-107	Om Prakash	BMW	G 310 GS	Full	Artha Chowdary
C-109	Deepankar Mali	Honda	Highness CB350	Full	Darsh Varma
C-101	Raj Koli	KTM	390 Adventure	Partial	Raghav Lal

Show all the customers who still haven’t completed their Payment

```
115 select * from Customer_sales where PaymentStatus="Partial";
116
```

C_Id	Cname	Brand	Model	PaymentStatus	Salesman_Assigned
C-102	Omkar Kumar	Bajaj	Pulsar 150	Partial	Ravi Kapadia
C-104	Harsh Kapoor	Royal Enfield	Classic 350	Partial	Aditya Patil
C-101	Raj Koli	KTM	390 Adventure	Partial	Raghav Lal

Show how many types of Royal Enfield the Dealership has

```
118 select count(Model) as "Types of bikes", Brand from bikes
119 group by Brand having Brand=("Royal Enfield");
120
```

Types of bikes	Brand
3	Royal Enfield

Perform an outer join table(s) to display Clients who made a Full or Partial Payment along with those who didn't Purchase anything in alphabetical order

```
129 select customers.C_id, customers.CName as "Client Name", customers.contactno,
130 sales_details.BikeID, sales_details.BikeDelivered, PaymentStatus
131 from customers
132 left outer join sales_Details on customers.C_id=sales_details.C_Id
133 left outer join finance on finance.PaymentID=sales_details.PaymentID
134 order by(CName);
135
```

C_id	Client Name	contactno	BikeID	BikeDelivered	PaymentStatus
C-105	Arun Patil	7864986153	*NULL*	*NULL*	*NULL*
C-109	Deepankar Mali	7518945637	B-105	Y	Full
C-104	Harsh Kapoor	9865478513	B-101	N	Partial
C-103	Jay Pawar	7589468234	*NULL*	*NULL*	*NULL*
C-108	Jayesh Thali	7954286428	B-105	Y	Full
C-107	Om Prakash	7984197645	B-115	Y	Full
C-102	Omkar Kumar	9487564896	B-108	Y	Partial
C-106	Omkar Thali	9846157623	*NULL*	*NULL*	*NULL*
C-110	Priyash Patil	9876454654	*NULL*	*NULL*	*NULL*
C-101	Raj Koli	9856478513	B-116	N	Partial

Show the average money spent by customers who have paid in full

```
122 select avg(price) as "Average money spent" from customers, sales_details, bikes, finance
123 where customers.C_id=sales_details.C_id and bikes.Bikeid=sales_Details.Bikeid
124 and finance.PaymentID=sales_details.PaymentID and finance.PaymentStatus="Full";
125
```

Average money spent
286651.79

Show the salaries of employee(s) which are less than that of Salesman ID SN-104 and give them a remark saying “Increment of 5%”

```
138 select SalesmanNo, Name, Salary,
139 CASE when salary<(select salary from salesman where SalesmanNo="SN-104")
140 then "Increment by 5%"
141 else "No increment Needed"
142 end as Remarks
143 from salesman;
144
```

SalesmanNo	Name	Salary	Remarks
SN-101	Aditya Patil	45456.56	No increment Needed
SN-102	Darsh Varma	36574.46	Increment by 5%
SN-103	Artha Chowdary	36879.46	Increment by 5%
SN-104	Raghav Lal	41574.91	No increment Needed
SN-105	Ashwin Joshi	43156.48	No increment Needed
SN-106	Ravi Kapadia	36789.14	Increment by 5%