



Daffodil
International
University

Group Name : **3 STAR**
Section : PC - F
Topic : Cycle Ride Sharing (DBMS Project)

【Group Members】

- | | |
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【Submitted to】

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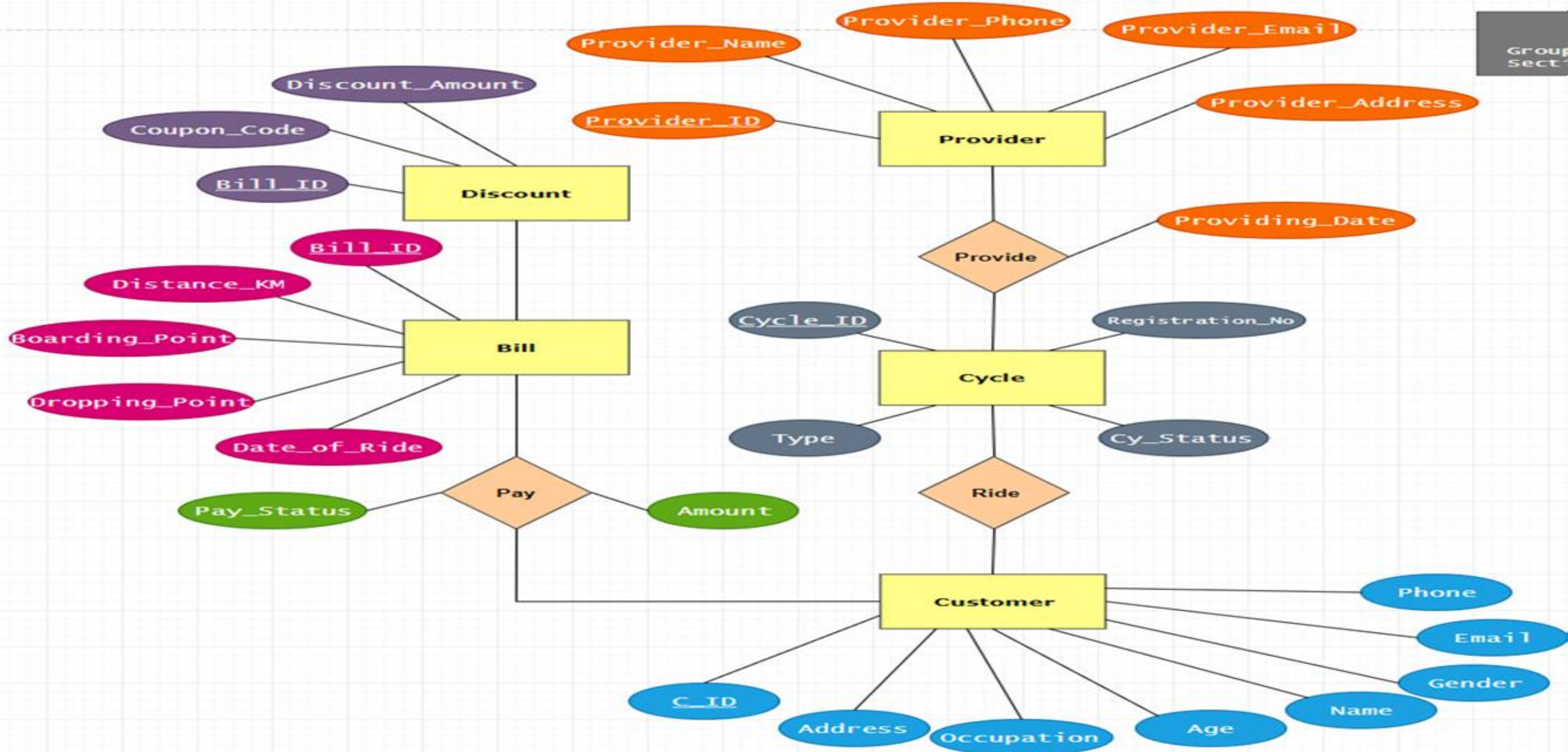
【STORY】

We launch a **Cycle Ride Sharing** company called '**GHURAO**' in Daffodil International University, Permanent Campus. We created a database that can be used by a developer who can develop a ride sharing database application for our company .

A **Customer** has ID, Name, Age, Gender, Address, Occupation, Email ID and Phone No. There is also **cycle provider** who provides cycle to the customer .There is a providing Date and Provider has ID, Name, Phone, Email, Address. To know the information about **cycle** there is Cycle Details which have Cycle ID, Type, Registration No, Status. Customer can take ride by using Cycle and also can pay their bill .Bill provide some handsome **discount**. In this, **Bill** section which have Bill ID, Boarding Point, Dropping Point, Distance KM, Date Of Ride. In **payment** there is Customer ID, Bill ID, Cycle ID, Amount, Pay Status and in discount there are Bill ID, Coupon Code, Discount Amount

After a few days of launching this 'GHURAO' project, It gets very popular.

【ER-DIAGRAM】



【SCHEMA】

- **Customer**(C_ID, Name, Age, Gender, Address, Occupation, Email_ID, Phone_No)
- **Provider**(Provider_ID, Povidar_Name, Provider_Phone, Provider_Email, Provider_Address)
- **Cycle**(Cycle_ID, Type, Registration_No, Cy_Status)
- **Provide**(Provider_ID, Cycle_ID, Providing_Date);
- **Bill**(Bill_ID, Boarding_Point, Dropping_Point, Distance_KM, Date_Of_Ride)
- **Discount** (Bill_ID, Coupon_Code, Discount_Amount)
- **Pay**(Customer_ID, Bill_ID, Cycle_ID, Amount, Pay_Status)
- **Ride**(Cycle_ID, Customer_ID)



【CODE SEGMENT】


```
CREATE TABLE Customer (
  C_ID varchar(20) PRIMARY KEY,
  Name varchar(50) NOT NULL,
  Age float NOT NULL,
  Gender varchar(100) NOT NULL,
  Address varchar(100) NOT NULL,
  Occupation varchar(100) NOT NULL,
  Email_ID varchar(100) UNIQUE,
  Phone_No varchar(15) UNIQUE
);
```

C_ID	Name	Age	Gender	Address	Occupation	Email_ID	Phone_No
1001	Fahim hasan	21	Male	aaaa	Student	fahim@gmail.com	01751360994
1002	Md Abdullah Al Mamun	24	male	Asulia	Student	mamun@gmail.com	01983476444
1003	Abdul Aual	21	male	YKSG	Student	aual@gmail.com	01521445105
1004	Md Shoyaib mahmud	21	Male	YKS	Student	Shoyaib@gmail.com	01777777777
1005	mitu	21	Female	YKSG	Student	mitu@gmail.com	01517006325
1006	Zobayer Sheik	24	Male	Ashulia	Student	zobzyer@gmail.com	01940635869
1007	Ela	23	Female	Uttara	Student	ela@gmail.com	01787114278
1008	Jabin	24	Female	Ashulia	Student	jabin@gmail.com	01300000000
1009	Sourov	34	Male	Dattapara	Teacher	sourov@gmail.com	01830635861
1010	nabil	32	Male	Ashulia	Student	nabil@gmail.com	01222635866

```
INSERT INTO customer(C_ID,Name,Age,Gender,Address,Occupation,Email_ID,Phone_No)
VALUES
('1001','Fahim hasan',21,'Male','aaaa','Student','fahim@gmail.com','01751360994'),
('1002','Md Abdullah Al
Mamun',24,'male','Asulia','Student','mamun@gmail.com','01983476444'),
('1003','Abdul Aual',21,'male','YKSG','Student','aual@gmail.com','01521445105'),
('1004','Md Shoyaib
mahmud ',21,'Male','YKS','Student','Shoyaib@gmail.com','01777777777'),
('1005','mitu',21,'Female','YKSG','Student','mitu@gmail.com','01517006325'),
('1006','Zobayer Sheik ',24,'Male','Ashulia','Student','zobzyer@gmail.com','0194063
5869'),
('1007','Ela',23,'Female','Uttara','Student','ela@gmail.com','01787114278'),
('1008','Jabin',24,'Female','Ashulia','Student','jabin@gmail.com','01300000000'),
('1009','Sourov',34,'Male','Dattapara','Teacher','sourov@gmail.com','01830635861'),
('1010','nabil',32,'Male','Ashulia','Student','nabil@gmail.com','01222635866');
```

```
CREATE TABLE Provider(  
    Provider_ID varchar (20) PRIMARY key,  
    Povider_Name varchar (30) NOT NULL,  
    Provider_Phone varchar(15) NOT NULL,  
    Provider_Email varchar(30) NOT NULL,  
    Provider_Address varchar(30) NOT NULL  
);
```

```
INSERT INTO provider  
VALUES  
( '01', 'Farhan Sadiq', '01774339285', 'far@gmail.com', 'Savar'),  
( '02', 'Abdur Rashid', '01774339286', 'rah@gmail.com', 'Mirpur'),  
( '03', 'Karim Hasan', '01774339288', 'kar@gmail.com', 'Mirpur'),  
( '04', 'Kasem Khan', '01924339287', 'kas@gmail.com', 'Mirpur'),  
( '05', 'Ayman Sadiq', '01924339281', 'ay@gmail.com', 'Ashulia'),  
( '06', 'Dhiman Roy', '01924339283', 'dhi@gmail.com', 'Ashulia'),  
( '07', 'Shamim Hossain', '01844339287', 'sha@gmail.com', 'Savar');
```

Provider_ID	Povider_Name	Provider_Phone	Provider_Email	Provider_Address
01	Farhan Sadiq	01774339285	far@gmail.com	Savar
02	Abdur Rashid	01774339286	rah@gmail.com	Mirpur
03	Karim Hasan	01774339288	kar@gmail.com	Mirpur
04	Kasem Khan	01924339287	kas@gmail.com	Mirpur
05	Ayman Sadiq	01924339281	ay@gmail.com	Ashulia
06	Dhiman Roy	01924339283	dhi@gmail.com	Ashulia
07	Shamim Hossain	01844339287	sa@gmail.com	Savar


```
CREATE TABLE Cycle(  
    Cycle_ID varchar(20) PRIMARY KEY,  
    Type varchar(50) NOT NULL,  
    Registration_No varchar(50) UNIQUE,  
    Cy_Status varchar (20) NOT NULL
```

```
);
```

```
INSERT INTO cycle(Cycle_ID,Type,Registration_No,Cy_Status)  
VALUES  
("S100","Pedal","DIU-S100","Good"),  
("S101","Auto","DIU-S101","Excellent"),  
("S102","Auto","DIU-S102","Good"),  
("S103","Pedal","DIU-S103","Bad"),  
("S104","Pedal","DIU-S104","Good"),  
("S105","Auto","DIU-S105","Medium"),  
("S106","Auto","DIU-S106","Excellent"),  
("S107","Pedal","DIU-S107","Good"),  
("S108","Pedal","DIU-S108","Bad"),  
("S109","Pedal","DIU-S109","Good");
```

Cycle_ID	Type	Registration_No	Cy_Status
S100	Pedal	DIU-S100	Good
S101	Auto	DIU-S101	Excellent
S102	Auto	DIU-S102	Good
S103	Pedal	DIU-S103	Bad
S104	Pedal	DIU-S104	Good
S105	Auto	DIU-S105	Medium
S106	Auto	DIU-S106	Excellent
S107	Pedal	DIU-S107	Good
S108	Pedal	DIU-S108	Bad
S109	Pedal	DIU-S109	Good

CREATE TABLE Provide(

```
Provider_ID varchar (20),  
Cycle_ID varchar(20),  
Providing_Date varchar (20),  
FOREIGN KEY (Provider_ID) REFERENCES  
provider(Provider_ID) ON UPDATE CASCADE ON  
DELETE CASCADE,  
FOREIGN KEY (Cycle_ID) REFERENCES cycle (  
Cycle_ID) ON UPDATE CASCADE ON DELETE CASCADE  
);
```

INSERT INTO provide
VALUES

```
('01', 'S100', '01-04-2019'),  
('02', 'S101', '03-04-2019'),  
('03', 'S102', '02-04-2019'),  
('04', 'S103', '03-04-2019'),  
('05', 'S104', '04-04-2019'),  
('06', 'S105', '05-04-2019'),  
('07', 'S106', '05-04-2019');
```

Options

Provider_ID	Cycle_ID	Providing_Date
01	S100	01-04-2019
02	S101	03-04-2019
03	S102	02-04-2019
04	S103	03-04-2019
05	S104	04-04-2019
06	S105	05-04-2019
07	S106	05-04-2019

```
CREATE TABLE Bill(  
    Bill_ID varchar (20) PRIMARY KEY,  
    Boarding_Point varchar (20) NOT NULL,  
    Dropping_Point varchar (20) NOT NULL,  
    Distance_KM float NOT NULL,  
    Date_Of_Ride varchar (20) NOT NULL  
);
```

```
INSERT INTO bill  
VALUES  
('G10001', 'DIU PC', 'Savar', '8', '01-04-2019'),  
('G10002', 'DIU PC', 'Khagan', '4', '02-04-2019'),  
('G10003', 'DIU PC', 'Akraine', '3', '03-04-2019'),  
('G10004', 'DIU PC', 'Ashulia', '6', '04-04-2019'),  
('G10005', 'Akraine', 'DIU PC', '8', '05-04-2019'),  
('G10006', 'Khagan', 'DIU PC', '8', '06-04-2019'),  
('G10007', 'Ashulia', 'DIU PC', '7', '07-04-2019'),  
('G10008', 'Khagan', 'DIU PC', '2', '08-04-2019'),  
('G10009', 'Khagan', 'DIU PC', '3', '09-04-2019'),  
('G10010', 'Khagan', 'DIU PC', '4', '10-04-2019');
```

Bill_ID	Boarding_Point	Dropping_Point	Distance_KM	Date_Of_Ride
G10001	DIU PC	Savar	8	01-04-2019
G10002	DIU PC	Khagan	4	02-04-2019
G10003	DIU PC	Akraine	3	03-04-2019
G10004	DIU PC	Ashulia	6	04-04-2019
G10005	Akraine	DIU PC	8	05-04-2019
G10006	Khagan	DIU PC	8	06-04-2019
G10007	Ashulia	DIU PC	7	07-04-2019
G10008	Khagan	DIU PC	2	08-04-2019
G10009	Khagan	DIU PC	3	09-04-2019
G10010	Khagan	DIU PC	4	10-04-2019


```
CREATE TABLE Discount (  
    Bill_ID varchar (20),  
    Coupon_Code varchar (20) UNIQUE,  
    Discount_Amount float NOT NULL,  
    FOREIGN KEY (Bill_ID) REFERENCES  
    bill(Bill_ID) ON UPDATE CASCADE ON  
    DELETE CASCADE
```

```
);  
INSERT INTO discount  
VALUES  
( 'G10001', 'GHURRR', 100),  
( 'G10002', 'GHOOOP', 45),  
( 'G10003', 'GHUSSS', 100),  
( 'G10004', 'GHUEEE', 150),  
( 'G10005', 'GHUYYY', 60),  
( 'G10006', 'GHUZZZ', 100),  
( 'G10007', 'GHUAAA', 92),  
( 'G10008', 'GHUBBB', 100),  
( 'G10009', 'GHUBBX', 85),  
( 'G10010', 'GHUDDD', 100);
```

Bill_ID	Coupon_Code	Discount_Amount
G10001	GHURRR	100
G10002	GHOOOP	45
G10003	GHUSSS	100
G10004	GHUEEE	150
G10005	GHUYYY	60
G10006	GHUZZZ	100
G10007	GHUAAA	92
G10008	GHUBBB	100
G10009	GHUBBX	85
G10010	GHUDDD	100

```
CREATE TABLE Pay(
    Customer_ID varchar (20),
    Bill_ID varchar (20) UNIQUE,
    Cycle_ID varchar (20),
    Amount float NOT NULL,
    Pay_Status varchar (10) NOT NULL,
    FOREIGN KEY (Customer_ID) REFERENCES customer(C_ID) ON UPDATE
    CASCADE ON DELETE CASCADE,
    FOREIGN KEY (Bill_ID) REFERENCES bill(Bill_ID) ON UPDATE
    CASCADE ON DELETE CASCADE,
    FOREIGN KEY (Cycle_ID) REFERENCES provide(Cycle_ID) ON UPDATE
    CASCADE ON DELETE CASCADE
);
```

```
INSERT INTO pay VALUES
('1001','G10001','S100',500,'Done'),
('1001','G10002','S100',400,'Done'),
('1003','G10003','S101',300,'Done'),
('1003','G10004','S106',250,'Done'),
('1003','G10005','S101',450,'Done'),
('1006','G10006','S103',200,'Done'),
('1004','G10007','S101',900,'Done'),
('1004','G10008','S102',300,'Done'),
('1004','G10009','S101',700,'Done'),
('1002','G10010','S104',300,'Done');
```

Customer_ID	Bill_ID	Cycle_ID	Amount	Pay_Status
1001	G10001	S100	500	Done
1001	G10002	S100	400	Done
1003	G10003	S101	300	Done
1003	G10004	S106	250	Done
1003	G10005	S101	450	Done
1006	G10006	S103	200	Done
1004	G10007	S101	900	Done
1004	G10008	S102	300	Done
1004	G10009	S101	700	Done
1002	G10010	S104	300	Done

CREATE TABLE **Rid**(

Cycle_ID varchar (20),

Customer_ID varchar (20),

FOREIGN KEY (Cycle_ID) REFERENCES cycle(Cycle_ID) ON

DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (Customer_ID) REFERENCES customer(C_ID) ON

DELETE CASCADE ON UPDATE CASCADE);

INSERT INTO ride (`Cycle_ID`, `Customer_ID`) VALUES

('S100', '1001'),

('S100', '1002'),

('S101', '1003'),

('S106', '1004'),

('S101', '1005'),

('S103', '1006'),

('S101', '1007'),

('S102', '1008'),

('S101', '1009'),

('S104', '1010');

+ Options

Cycle_ID	Customer_ID
S100	1001
S100	1002
S101	1003
S106	1004
S101	1005
S103	1006
S101	1007
S102	1008
S101	1009
S104	1010



【QUERY】

1. Find the Bill_ID, customer name and payment amount for paying bill From 04-04-2019 to 05-04-19 ??

Query :

```
select Bill. bill_id, customer.name, pay. amount from  
pay , bill , customer where pay . bill_id=bill . bill_id AND  
customer . C_ID= pay . Customer_ID AND bill .  
date_of_ride between '04-04-2019' AND '05-04-2019';
```

2. A Cycle which registration number is “DIU-S104”. Find the owner of this Cycle !

Query :

```
SELECT provider . Pprovider _ Name from provider,  
provide, cycle where provide . Provider _ ID = provider.  
Provider _ ID AND cycle. Cycle _ ID = provide . Cycle_  
ID AND cycle . Registration _ No = 'DIU-S104'
```

Options

bill_id	name	amount
G10004	Abdul Aual	250
G10005	Abdul Aual	450

Povider_Name
Ayman Sadiq

3. Show the Customer_Name, date of ride and pay Amount of those customers who pays more than average Amount ?

Query :

```
SELECT customer.Name, bill.Date_Of_Ride, pay.Amount FROM
customer,bill ,pay WHERE customer.C_ID = pay.Customer_ID AND
bill.Bill_ID = pay.Bill_ID AND pay.Amount > ( SELECT AVG (
pay.Amount ) FROM pay ) ;
```

4. Find the Cycle_ID and Total income for each cycle which is based on total amount in descending order.

Query :

```
SELECT Cycle_ID , SUM(Amount) as 'Individual Total Income'
FROM pay GROUP BY Cycle_ID ORDER BY SUM(Amount)
DESC;
```

Name	Date_Of_Ride	Amount
Arak Ayman Labnan	04-04-2019	500
Mobassers Asma Sadia	04-04-2019	450
Hosnain Ahammad	03-04-2019	900
Hosnain Ahammad	06-04-2019	700

Cycle_ID	Individual Total Income
S101	2350
S100	900
S102	300
S104	300
S106	250
S103	200

5. Find the customer name ,bill amount and discount of Bill ID :
"G10008"

Query :

```
SELECT customer.Name ,  
pay.Amount,discount.Discount_Amount FROM customer,  
bill,pay,discount WHERE customer.C_ID=pay.Customer_ID  
AND bill.Bill_ID=pay.Bill_ID AND bill.Bill_ID=  
discount.Bill_ID AND discount.Bill_ID = "G10008";
```

Name	Amount	Discount_Amount
Hosnain Ahammad	300	100

6. Show the total amount of payment from riding by gp user
customer?

Query :

```
SELECT SUM( pay.Amount) as"Total Payment By GP  
User" FROM customer,pay WHERE customer.C_ID =  
pay.Customer_ID AND customer.Phone_No LIKE "017%";
```

Total Payment By GP User
4100

7. Find the Name and Payment Amount of all customers who is riding from “Khagan” to “DIU PC”

Query :

```
SELECT customer.Name,pay.Amount FROM bill,customer,pay
WHERE customer.C_ID=pay.Customer_ID AND bill.Bill_ID=pay.Bill_ID
AND bill.Boarding_Point="Khagan" AND bill.Dropping_Point ="DIU
PC";
```

Name	Amount
Rifat Ahammad	200
Hosnain Ahammad	300
Hosnain Ahammad	700
Tabassum Tanha	300

8. Show customer id and id wise total Payment and order the result based on the total payment in descending order

Query :

```
select Customer_ID, sum(Amount) as "Total Bill of a Customer" from
pay GROUP by Customer_ID order by Sum(Amount) desc;
```

Customer_ID	Total Bill of a Customer
1004	1900
1003	1000
1001	900
1002	300
1006	200

9. Show the Name and Email of the customer who uses GP operator and lived in “YKSG”

Query :

```
SELECT name, Email_ID FROM customer
WHERE phone_no like "017%" AND
Address="YKSG";
```

10. Find the information of Cycle where the provider id is “01”

Query :

```
SELECT * FROM cycle WHERE Cycle_ID in
(SELECT Cycle_ID FROM provide WHERE
Provider_ID="01");
```

name	Email_ID
Arak Ayman Labnan	labnan@gmail.com
Mobassers Asma Sadia	asma@gmail.com
Hosnain Ahammad	hosnain@gmail.com
Sharmin Shamme	shamme@gmail.com

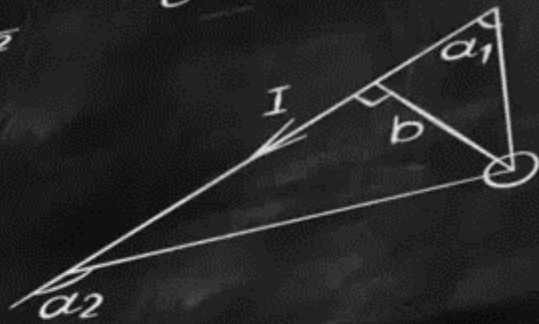
Cycle_ID	Type	Registration_No	Cy_Status
S100	Pedal	DIU-S100	Good

$$\varphi(\ln x) d(\ln x) = \sqrt{2\pi} \sigma$$

$$\langle r \rangle = \frac{\langle v \rangle t}{n \sqrt{2\pi} d^2}$$

$$C = \frac{\epsilon \epsilon_0 S}{d}$$

$$C = 4\pi\epsilon\epsilon_0 \frac{r_1 r_2}{r_2 - r_1}$$



$$B = 2\pi b$$

$$A^2 = A_1^2 + A_2^2 + 2 A_1 A_2 \cos(\varphi_2 - \varphi_1)$$

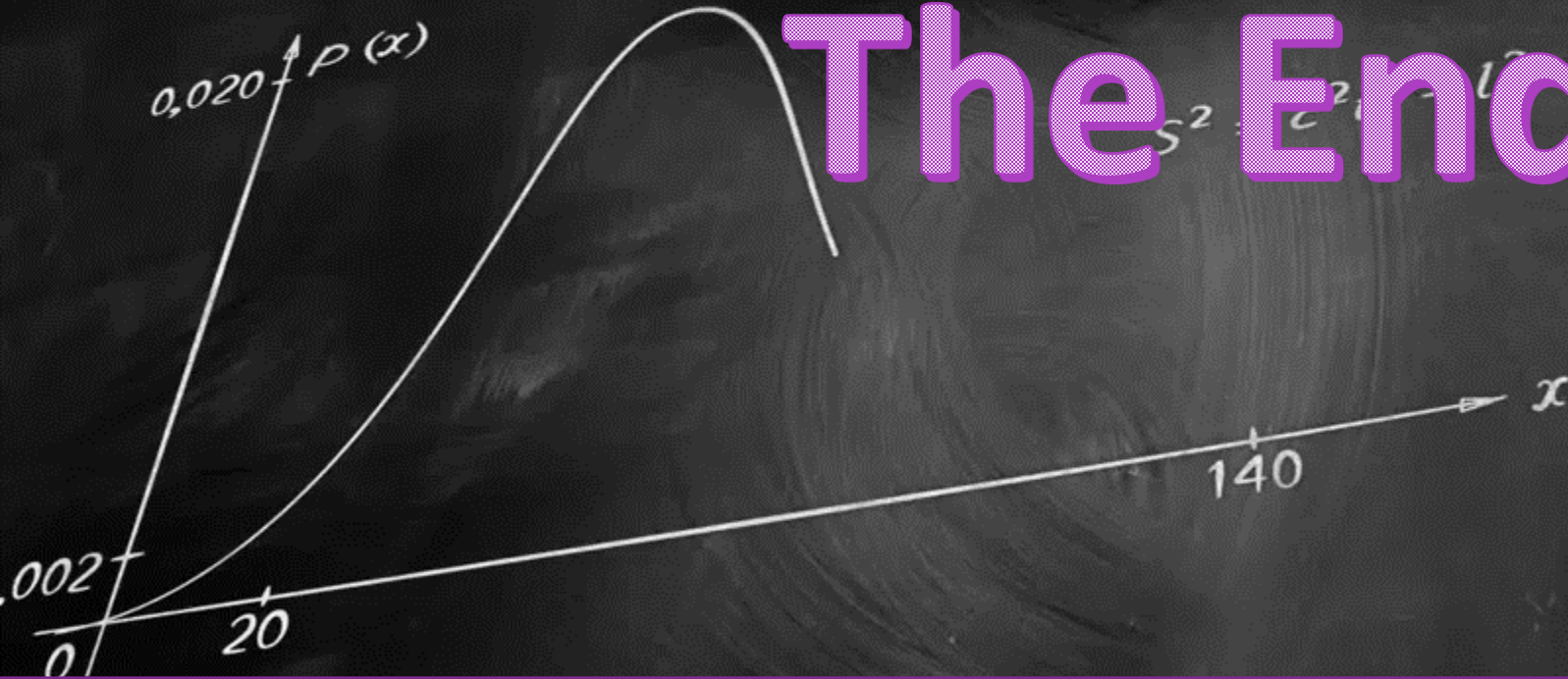
$$h\nu = A + \frac{mv^2}{2}$$

$$m = m_0 / \sqrt{1 - \frac{v^2}{c^2}}$$

$$E = m_0 c^2 + \frac{mv^2}{2}$$

$$r_n = \frac{4\pi\epsilon_0 \hbar^2 n^2}{mZe^2}$$

$$N = N_0 \cdot 2^{-t}$$



The End

ZERO TO INFINITY

Slide Designed by: 3 STAR