

Create the following tables

Customer master table- Customer

| Column Name | Format | Remarks |
|-------------|--------------|------------------------------|
| Cust_id | Varchar2(10) | Primary key, Starts with 'C' |
| Fname | Varchar2(15) | |
| Lname | Varchar2(15) | |
| Area | Varchar2(5) | |
| Phone_no | Number(10) | Not Null |

Movies master table: Movie

| Column Name | Format | Remarks |
|-------------|--------------|------------------------------|
| Mv_no | Varchar2(5) | Primary key, Starts with 'M' |
| Title | Varchar2(25) | |
| Type | Varchar2(10) | |
| Star | Varchar2(25) | |
| Price | Number(8,2) | |

Invoice transaction table: Invoice

| Column Name | Format | Remarks |
|-------------|--------------|------------------------------|
| Inv_no | Varchar2(10) | Primary key, Starts with 'I' |
| Mv_no | Varchar2(5) | References Movie table |
| Cust_id | Varchar2(10) | References Customer table |
| Issue_date | Date | |
| Return_date | Date | |

```

Create table Customer(
    Cust_id varchar2(10) primary key check(Cust_id like 'C%'),
    Fname varchar2(15),
    Lname varchar2(15),
    Area varchar2(5),
    Phone_no number(10) not null
);

Create table Movie(
    Mv_no varchar2(5) primary key check(Mv_no like 'M%'),
    Title varchar2(25),
    Type varchar2(10),
    Star varchar2(25),
    Price number(8,2)
);

Create table Invoice(
    Inv_no varchar2(10) primary key check(Inv_no like 'I%' ),
    Mv_no varchar2(5) references Movie,
    Cust_id varchar2(10) references Customer,
    Issue_date Date,
    Return_date Date
);

insert into Customer values ('C01','Bayross','Ivan','sa',6125467);
insert into Customer values ('C02','Saitwal','Vandana','mu',5560379);
insert into Customer values ('C03','Jaguste','Pramada','da',4563891);
insert into Customer values ('C04','Navindgi','Basu','ba',6125401);
insert into Customer values ('C06','Koushik ','Rukmini','gh',5125274);

```

```

insert into movie values ('M001','bloody vengeance','action','jackie chan',180.95);
insert into movie values ('M002','the firm','thriller','tom cruise',200.00);
insert into movie values ('M003','pretty woman','romance','richard gere',200.00);
insert into movie values ('M004','home alone','comedy','macaulay culkin',150);
insert into movie values ('M005','the fugitive','thriller','harisson ford',200.00);
insert into movie values ('M006','coma','suspense','michael douglas',100.00);
insert into movie values ('M007','dracula','horror','gary oldman',150.25);
insert into movie values ('M008','quick change','comedy','bill muray',100.00);
insert into movie values ('M009','gone with the wind','drama','clarke gable',200.00);
insert into movie values ('M010','carry on doctor','comedy','leslie phillips',100.00);

```

```

insert into invoice values ('I01','M004','C01','23-jul-93','25-jul-93');
insert into invoice values ('I02','M003','C02','12-aug-93','15-aug-93');
insert into invoice values ('I03','M001','C02','15-aug-93','18-aug-93');
insert into invoice values ('I04','M006','C03','10-sep-93','12-sep-93');
insert into invoice values ('I05','M007','C04','05-aug-93','08-aug-93');
insert into invoice values ('I06','M002','C06','18-sep-93','21-sep-93');

```

```

insert into invoice values ('I07','M009','C05','07-jul-93','10-jul-93');
insert into invoice values ('I08','M009','C01','11-aug-93','14-aug-93');
insert into invoice values ('I09','M005','C03','06-jul-93','07-jul-93');
insert into invoice values ('I10','M008','C06','03-sep-93','06-sep-93');

```

A. Print the type and average price of each movie.

```

SQL> select type from movie;

TYPE
-----
action
thriller
romance
comedy
thriller
suspense
horror
comedy
drama
comedy

10 rows selected.

SQL> select avg(price) from movie;

AVG(PRICE)
-----
      158.12

```

B. Find out the movie number which has been issued to 'Bayross'.

```

SQL> select Mv_no from Invoice where Cust_id='C01';

MV_NO
-----
M004
M009

```

C. Find out which customer has been issued movie number 'M009'.

```

SQL> select fname from customer where cust_id in(select cust_id from invoice
where mv_no='M009');

FNAME
-----
Bayross

```

D. Display the invoice number and day on which customers were issued movies.

```

SQL> select inv_no,issue_date from invoice;

INV_NO      ISSUE_DAT
-----
I01          23-JUL-93
I02          12-AUG-93
I03          15-AUG-93
I04          10-SEP-93
I05          05-AUG-93
I06          18-SEP-93
I08          11-AUG-93
I09          06-JUL-93
I10          03-SEP-93

9 rows selected.

```

E. Change the telephone number of Koushik to 466389.

```
update Customer set Phone_no=466389 where Fname='Koushik';
```

A. Find the number of movies in each type.

```
SQL> select type,count(type) from movie group by type;
```

| TYPE | COUNT(TYPE) |
|----------|-------------|
| action | 1 |
| thriller | 2 |
| romance | 1 |
| comedy | 3 |
| suspense | 1 |
| horror | 1 |
| drama | 1 |

7 rows selected.

B. Find the names and movie numbers of all the customers who have been issued a movie.

```
SQL> select fname,lname,mv_no from customer,invoice where  
invoice.cust_id=customer.cust_id;
```

| FNAME | LNAME | MV_NO |
|----------|---------|-------|
| Bayross | Ivan | M004 |
| Saitwal | Vandana | M003 |
| Saitwal | Vandana | M001 |
| Jaguste | Pramada | M006 |
| Navindgi | Basu | M007 |
| Koushik | Rukmini | M002 |
| Bayross | Ivan | M009 |
| Jaguste | Pramada | M005 |
| Koushik | Rukmini | M008 |

9 rows selected.

C. Find the Customer name and area with invoice number 'I010'.

```
SQL> select fname,lname,area from Customer where cust_id  
in(select cust_id from invoice where inv_no='I10');
```

| FNAME | LNAME | AREA |
|---------|---------|------|
| Koushik | Rukmini | gh |

D. Display the months (in alphabets) in which customers are supposed to return the movie.

```
SQL> select to_char(return_date,'dd-month-yy')from invoice;
```

```
TO_CHAR(RETURN_DATE,'DD-MONTH-YY')
```

```
-----  
25-july      -93  
15-august    -93  
18-august    -93  
12-september-93  
08-august    -93  
21-september-93  
14-august    -93  
07-july      -93  
06-september-93
```

```
9 rows selected.
```

E. Change the issue date of customer id 'C101' to 24/07/93.

```
SQL> update invoice set issue_date='24-jul-93' where cust_id='C01';
```

```
2 rows updated.
```

```
SQL> select * from invoice;
```

| INV_NO | MV_NO | CUST_ID | ISSUE_DAT | RETURN_DA |
|--------|-------|---------|-----------|-----------|
| I01 | M004 | C01 | 24-JUL-93 | 25-JUL-93 |
| I02 | M003 | C02 | 12-AUG-93 | 15-AUG-93 |
| I03 | M001 | C02 | 15-AUG-93 | 18-AUG-93 |
| I04 | M006 | C03 | 10-SEP-93 | 12-SEP-93 |
| I05 | M007 | C04 | 05-AUG-93 | 08-AUG-93 |
| I06 | M002 | C06 | 18-SEP-93 | 21-SEP-93 |
| I08 | M009 | C01 | 24-JUL-93 | 14-AUG-93 |
| I09 | M005 | C03 | 06-JUL-93 | 07-JUL-93 |
| I10 | M008 | C06 | 03-SEP-93 | 06-SEP-93 |

```
9 rows selected.
```

A. Calculate the average price of all movies where type is 'Comedy' or 'Thriller' and price is greater than or equal to 150.00.

```
SQL> select type,avg(price) from movie where price>=150 group by type having  
type in ('comedy','thriller');
```

| TYPE | AVG(PRICE) |
|----------|------------|
| thriller | 200 |
| comedy | 150 |

B. Find the names of customers who have been issued movie of type 'drama'.

```
SQL> select fname,lname from customer where cust_id in (select cust_id from invoice where mv_no in (select mv_no from movie where type = 'drama'));
```

| FNAME | LNAME |
|---------|-------|
| ----- | ----- |
| Bayross | Ivan |

C. Find out the movie starring 'Tom Crusie' is issued to any customer and print the cust_id to whom it is issued.

```
SQL> select cust_id from Customer where cust_id in (select cust_id from invoice where mv_no in (select mv_no from movie where star='tom cruise'));
```

| CUST_ID |
|---------|
| ----- |
| C06 |

D. Find the number of days elapsed between the current date and return date of the movie for all customers.

```
SQL> select sysdate-return_date from invoice;
```

| SYSDATE-RETURN_DATE |
|---------------------|
| ----- |
| 10903.0202 |
| 10882.0202 |
| 10879.0202 |
| 10854.0202 |
| 10889.0202 |
| 10845.0202 |
| 10883.0202 |
| 10921.0202 |
| 10860.0202 |

9 rows selected.

E. Change the area of cust_id 'C005' to 'vs'.

```
SQL> update Customer set area='vs' where cust_id='C04';
```

1 row updated.

```
SQL> select * from Customer;
```

| CUST_ID | FNAME | LNAME | AREA | PHONE_NO |
|---------|----------|---------|-------|----------|
| ----- | ----- | ----- | ----- | ----- |
| C01 | Bayross | Ivan | sa | 6125467 |
| C02 | Saitwal | Vandana | mu | 5560379 |
| C03 | Jaguste | Pramada | da | 4563891 |
| C04 | Navindgi | Basu | vs | 6125401 |
| C06 | Koushik | Rukmini | gh | 5125274 |