QUESTION 1

Consider the following tables STORE and SUPPLIERS and answer the questions.

TABLE : STORE

Number of Records: 7

ITEMNO	ITEM	SCODE	QTY	RATE	LASTBUY
2005	SHARPENER CLASSIC	23	60	8	2009-06-31
2003	BALL PEN 0.25	22	50	25	2010-02-01
2002	GEL PEN PREMIUM	21	150	12	2010-02-24
2006	GEL PEN CLASSIC	21	250	20	2009-03-11
2001	ERASER SMALL	22	220	6	2009-01-19
2004	ERASER BIG	22	110	8	2009-12-02
2009	BALL PEN 0.5	21	180	18	2009-11-03

TABLE : SUPPLIERS

Number of Records: 3

SCODE	SNAME
21	PREMIUM STATIONERS
23	SOFT PLASTICS
22	TETRA SUPPLY

i) To display the details of all the items in the Store table in ascending order of LastBuy.
ii) To display the ItemNo and Item name of those items from Store table whose Rate is more than 15 Rupees.
iii) To display the details of those items whose Suppliers code is 22 or Quantity in Store is more than 110 from the table Store.
iv) To display the minimum rate of items for each supplier individually as per SCode from the table store.

CREATING TABLES

STORE

CREATE TABLE STORE (ITEMNO INTEGER NOT NULL PRIMARY KEY, ITEM VARCHAR(50) NOT NULL, SCODE INTEGER, QTY INTEGER, RATE INTEGER, LASTBUY DATETIME);

INSERT INTO STORE VALUES (2005, 'SHARPENER CLASSIC', 23, 60, 8, '2009-06-31');
INSERT INTO STORE VALUES (2003, 'BALL PEN 0.25', 22, 50, 25, '2010-02-01');
INSERT INTO STORE VALUES (2002, 'GEL PEN PREMIUM', 21, 150, 12, '2010-02-24');
INSERT INTO STORE VALUES (2006, 'GEL PEN CLASSIC', 21, 250, 20, '2009-03-11');
INSERT INTO STORE VALUES (2001, 'ERASER SMALL', 22, 220, 6, '2009-01-19');
INSERT INTO STORE VALUES (2004, 'ERASER BIG', 22, 110, 8, '2009-12-02');
INSERT INTO STORE VALUES (2009, 'BALL PEN 0.5', 21, 180, 18, '2009-11-03');

Number of Records: 7

ITEMNO	ITEM	SCODE	QTY	RATE	LASTBUY
2005	SHARPENER CLASSIC	23	60	8	2009-06-31
2003	BALL PEN 0.25	22	50	25	2010-02-01
2002	GEL PEN PREMIUM	21	150	12	2010-02-24
2006	GEL PEN CLASSIC	21	250	20	2009-03-11
2001	ERASER SMALL	22	220	6	2009-01-19
2004	ERASER BIG	22	110	8	2009-12-02
2009	BALL PEN 0.5	21	180	18	2009-11-03

SUPPLIERS

CREATE TABLE SUPPLIERS (SCODE INTEGER NOT NULL, SNAME CHAR(20) NOT NULL);

INSERT INTO SUPPLIERS VALUES (21, 'PREMIUM STATIONERS');
INSERT INTO SUPPLIERS VALUES (23, 'SOFT PLASTICS');
INSERT INTO SUPPLIERS VALUES (22, 'TETRA SUPPLY');

Number of Records: 3

SCODE	SNAME
21	PREMIUM STATIONERS
23	SOFT PLASTICS
22	TETRA SUPPLY

ANSWERS

i) SELECT * FROM STORE ORDER BY LASTBUY ASC;

Number of Records: 7

ITEMNO	ITEM	SCODE	QTY	RATE	LASTBUY
2001	ERASER SMALL	22	220	6	2009-01-19
2006	GEL PEN CLASSIC	21	250	20	2009-03-11
2005	SHARPENER CLASSIC	23	60	8	2009-06-31
2009	BALL PEN 0.5	21	180	18	2009-11-03
2004	ERASER BIG	22	110	8	2009-12-02
2003	BALL PEN 0.25	22	50	25	2010-02-01
2002	GEL PEN PREMIUM	21	150	12	2010-02-24

ii) SELECT ITEMNO, ITEM FROM STORE WHERE RATE>15;

Number of Records: 3

ITEMNO	ITEM
2003	BALL PEN 0.25
2006	GEL PEN CLASSIC
2009	BALL PEN 0.5

iii) SELECT * FROM STORE WHERE SCODE=22 OR QTY>110;

Number of Records: 6

ITEMNO	ITEM	SCODE	QTY	RATE	LASTBUY
2003	BALL PEN 0.25	22	50	25	2010-02-01
2002	GEL PEN PREMIUM	21	150	12	2010-02-24
2006	GEL PEN CLASSIC	21	250	20	2009-03-11
2001	ERASER SMALL	22	220	6	2009-01-19
2004	ERASER BIG	22	110	8	2009-12-02
2009	BALL PEN 0.5	21	180	18	2009-11-03

iv) SELECT ITEM, SUPPLIERS.SCODE, SNAME, MIN(RATE) FROM STORE, SUPPLIERS WHERE SUPPLIERS.SCODE=STORE.SCODE GROUP BY STORE.SCODE;

Number of Records: 3

ITEM	SCODE	SNAME	MIN(RATE)
GEL PEN PREMIUM	21	PREMIUM STATIONERS	12
ERASER SMALL	22	TETRA SUPPLY	6
SHARPENER CLASSIC	23	SOFT PLASTICS	8

QUESTION 2

Consider the following tables Item and Customer. Write SQL commands for the statement (i) to (iv).

TABLE : ITEM

i_ID	ItemName	Manufacturer	Price
PC01	Personal Computer	ABC	35000
LC05	Laptop	ABC	55000
PC03	Personal Computer	XYZ	32000
PC06	Personal Computer	COMP	37000
LC03	Laptop	PQR	57000

TABLE : CUSTOMER

C_ID	CustomerName	City	i_ID
01	N Roy	Delhi	LC03
06	H Singh	Mumbai	PC03
12	R Pandey	Delhi	PC06
15	C Sharma	Delhi	LC03
16	K Agarwal	Bangalore	PC01

i) To display the details of those customers whose city is Delhi.
ii) To display the details of item whose price is in the range of 35000 to 55000 (both values included).
iii) To display the customer name, city from table Customer, and ItemName and Price from table Item, with their corresponding i_ID.
iv) To increase the price of all items by 1000 in the table Item.

CREATING TABLES

CUSTOMER

CREATE TABLE CUSTOMER (C_ID VARCHAR(10), CUSTOMERNAME CHAR(20), CITY CHAR (20), I_ID VARCHAR(10));

INSERT INTO CUSTOMER VALUES ('01', 'N ROY', 'DELHI', ‘LC03’);
INSERT INTO CUSTOMER VALUES ('06', 'H SINGH', 'MUMBAI', ‘PC03');
INSERT INTO CUSTOMER VALUES ('12', 'R PANDEY', 'DELHI', ‘PC06’);
INSERT INTO CUSTOMER VALUES ('15', 'C SHARMA', 'DELHI', ‘LC03');
INSERT INTO CUSTOMER VALUES ('16', 'K AGARWAL', 'BANGLORE', ‘PC01');

Number of Records: 5

C_ID	CUSTOMERNAME	CITY	I_ID
01	N ROY	DELHI	LC03
06	H SINGH	MUMBAI	PC03
12	R PANDEY	DELHI	PC06
15	C SHARMA	DELHI	LC03
16	K AGARWAL	BANGLORE	PC01

ITEM

CREATE TABLE ITEM (I_ID VARCHAR(10), ITEMNAME CHAR(20), MANUFACTURER CHAR (20), PRICE DECIMAL)

INSERT INTO ITEM VALUES ('PC01', 'PERSONAL COMPUTER', 'ABC', 35000)
INSERT INTO ITEM VALUES ('LC05', 'LAPTOP', 'ABC', 55000)
INSERT INTO ITEM VALUES ('PC03', 'PERSONAL COMPUTER', 'XYZ', 32000)
INSERT INTO ITEM VALUES ('PC06', 'PERSONAL COMPUTER', 'COMP', 37000)
INSERT INTO ITEM VALUES ('LC03', 'LAPTOP', 'PQR', 57000)

Number of Records: 5

I_ID	ITEMNAME	MANUFACTURER	PRICE
PC01	PERSONAL COMPUTER	ABC	35000
LC05	LAPTOP	ABC	55000
PC03	PERSONAL COMPUTER	XYZ	32000
PC06	PERSONAL COMPUTER	COMP	37000
LC03	LAPTOP	PQR	57000

ANSWERS

i) SELECT * FROM CUSTOMER WHERE CITY='DELHI';

Number of Records: 3

C_ID	CUSTOMERNAME	CITY	I_ID
01	N ROY	DELHI	LC03
12	R PANDEY	DELHI	PC06
15	C SHARMA	DELHI	LC03

ii) SELECT * FROM ITEM WHERE PRICE BETWEEN 35000 AND 55000;

Number of Records: 3

I_ID	ITEMNAME	MANUFACTURER	PRICE
PC01	PERSONAL COMPUTER	ABC	35000
LC05	LAPTOP	ABC	55000
PC06	PERSONAL COMPUTER	COMP	37000

iii) SELECT CUSTOMERNAME, CITY, ITEMNAME, PRICE FROM CUSTOMER, ITEM WHERE CUSTOMER.I_ID=ITEM.I_ID;

Number of Records: 5

CUSTOMERNAME	CITY	ITEMNAME	PRICE
N ROY	DELHI	LAPTOP	57000
H SINGH	MUMBAI	PERSONAL COMPUTER	32000
R PANDEY	DELHI	PERSONAL COMPUTER	37000
C SHARMA	DELHI	LAPTOP	57000
K AGARWAL	BANGLORE	PERSONAL COMPUTER	35000

iv) UPDATE ITEM SET PRICE=PRICE+1000

Number of Records: 5

I_ID	ITEMNAME	MANUFACTURER	PRICE
PC01	PERSONAL COMPUTER	ABC	36000
LC05	LAPTOP	ABC	56000
PC03	PERSONAL COMPUTER	XYZ	33000
PC06	PERSONAL COMPUTER	COMP	38000
LC03	LAPTOP	PQR	58000

v) SELECT DISTINCT CITY FROM CUSTOMER;

Number of Records: 3

CITY
DELHI
MUMBAI
BANGLORE

vi) SELECT ITEMNAME, MAX(PRICE), COUNT(*) FROM ITEM GROUP BY ITEMNAME;

Number of Records: 2

ITEMNAME	MAX(PRICE)	COUNT(*)
LAPTOP	58000	2
PERSONAL COMPUTER	38000	3

vii) SELECT CUSTOMERNAME, MANUFACTURER FROM CUSTOMER, ITEM WHERE CUSTOMER.I_ID=ITEM.I_ID;

Number of Records: 5

CUSTOMERNAME	MANUFACTURER
N ROY	PQR
H SINGH	XYZ
R PANDEY	COMP
C SHARMA	PQR
K AGARWAL	ABC

viii) SELECT ITEMNAME, PRICE*100 FROM ITEM WHERE MANUFACTURER=‘ABC’;

Number of Records: 2

ITEMNAME	PRICE*100
PERSONAL COMPUTER	3500000
LAPTOP	5500000

QUESTION 3

Consider the following tables. Write SQL commands for the statement (i) to (iv).

TABLE : SENDER

Number of Records: 4

SENDERID	SENDERNAME	SENDERADRESS	SENDERCITY
ND01	R JAIN	2, ABC APPTS	NEW DELHI
MU02	H SINHA	12, NEWTON	MUMBAI
MU15	S JHA	27/A, PARK STREET	MUMBAI
ND50	T PRASAD	122-K, SDA	NEW DELHI

TABLE : RECIPIENT

Number of Records: 5

RECID	SENDERID	RECNAME	RECADRESS	RECCITY
KO05	ND01	R BAJPAYEE	5, CENTRAL AVENUE	KOLKATA
ND08	MU02	S MAHAJAN	116, A VIHAR	NEW DELHI
MU19	ND01	H SINGH	2A, ANDHERI EAST	MUMBAI
MU32	MU15	P K SWAMY	B5, CS TERMINUS	MUMBAI
ND48	ND50	S TRIPATHI	13, B1 D, MAYUR VIHAR	NEW DELHI

i) To display the names of all senders from Mumbai.
ii) To display the RecID, sender name, sender address, RecName, RecAddress for every Recipient.
iii) To display recipient details in ascending order of RecName.
iv) To display the number of recipients from each city.

CREATING TABLES

SENDER

CREATE TABLE SENDER (SENDERID VARCHAR(10), SENDERNAME CHAR(20), SENDERADRESS CHAR(30), SENDERCITY CHAR(20));

INSERT INTO SENDER VALUES ('ND01', 'R JAIN', '2, ABC APPTS', 'NEW DELHI');
INSERT INTO SENDER VALUES ('MU02', 'H SINHA', '12, NEWTON', 'MUMBAI');
INSERT INTO SENDER VALUES ('MU15', 'S JHA', '27/A, PARK STREET', 'MUMBAI');
INSERT INTO SENDER VALUES ('ND50', 'T PRASAD', '122-K, SDA', 'NEW DELHI');

Number of Records: 4

SENDERID	SENDERNAME	SENDERADRESS	SENDERCITY
ND01	R JAIN	2, ABC APPTS	NEW DELHI
MU02	H SINHA	12, NEWTON	MUMBAI
MU15	S JHA	27/A, PARK STREET	MUMBAI
ND50	T PRASAD	122-K, SDA	NEW DELHI

RECIPIENT

CREATE TABLE RECIPIENT (RECID VARCHAR(10), SENDERID VARCHAR(10), RECNAME CHAR(30), RECADRESS CHAR(30), RECCITY CHAR(10));

INSERT INTO RECIPIENT VALUES ('KO05', 'ND01', 'R BAJPAYEE', '5, CENTRAL AVENUE', 'KOLKATA');
INSERT INTO RECIPIENT VALUES ('ND08', 'MU02', 'S MAHAJAN', '116, A VIHAR', 'NEW DELHI');
INSERT INTO RECIPIENT VALUES ('MU19', 'ND01', 'H SINGH', '2A, ANDHERI EAST', 'MUMBAI');
INSERT INTO RECIPIENT VALUES ('MU32', 'MU15', 'P K SWAMY', 'B5, CS TERMINUS', 'MUMBAI');
INSERT INTO RECIPIENT VALUES ('ND48', 'ND50', 'S TRIPATHI', '13, B1 D, MAYUR VIHAR', 'NEW DELHI');

Number of Records: 5

RECID	SENDERID	RECNAME	RECADRESS	RECCITY
KO05	ND01	R BAJPAYEE	5, CENTRAL AVENUE	KOLKATA
ND08	MU02	S MAHAJAN	116, A VIHAR	NEW DELHI
MU19	ND01	H SINGH	2A, ANDHERI EAST	MUMBAI
MU32	MU15	P K SWAMY	B5, CS TERMINUS	MUMBAI
ND48	ND50	S TRIPATHI	13, B1 D, MAYUR VIHAR	NEW DELHI

ANSWERS

i) SELECT SENDERNAME FROM SENDER WHERE SENDERCITY='MUMBAI';

Number of Records: 2

SENDERNAME
H SINHA
S JHA

ii) SELECT RECID, SENDERNAME, SENDERADRESS, RECNAME, RECADRESS FROM RECIPIENT, SENDER WHERE SENDER.SENDERID=RECIPIENT.SENDERID GROUP BY SENDER.SENDERID;

Number of Records: 4

RECID	SENDERNAME	SENDERADRESS	RECNAME	RECADRESS
ND08	H SINHA	12, NEWTON	S MAHAJAN	116, A VIHAR
MU32	S JHA	27/A, PARK STREET	P K SWAMY	B5, CS TERMINUS
MU19	R JAIN	2, ABC APPTS	H SINGH	2A, ANDHERI EAST
ND48	T PRASAD	122-K, SDA	S TRIPATHI	13, B1 D, MAYUR VIHAR

iii) SELECT * FROM RECIPIENT ORDER BY RECNAME ASC;

Number of Records: 5

RECID	SENDERID	RECNAME	RECADRESS	RECCITY
MU19	ND01	H SINGH	2A, ANDHERI EAST	MUMBAI
MU32	MU15	P K SWAMY	B5, CS TERMINUS	MUMBAI
KO05	ND01	R BAJPAYEE	5, CENTRAL AVENUE	KOLKATA
ND08	MU02	S MAHAJAN	116, A VIHAR	NEW DELHI
ND48	ND50	S TRIPATHI	13, B1 D, MAYUR VIHAR	NEW DELHI

iv) SELECT DISTINCT RECCITY, COUNT(RECCITY) FROM RECIPIENT GROUP BY RECCITY;

Number of Records: 3

RECCITY	COUNT(RECCITY)
KOLKATA	1
MUMBAI	2
NEW DELHI	2

v) SELECT DISTINCT SENDERCITY FROM SENDER;

Number of Records: 2

SENDERCITY
NEW DELHI
MUMBAI

vi) SELECT A.SENDERNAME, B.RECNAME FROM SENDER A, RECIPIENT B WHERE A.SENDERID=B.SENDERID AND B.RECCITY='MUMBAI';

Number of Records: 2

SENDERNAME	RECNAME
R JAIN	H SINGH
S JHA	P K SWAMY

vii) SELECT RECNAME, RECADRESS FROM RECIPIENT WHERE RECCITY NOT IN ('MUMBAI', 'KOLKATA');

Number of Records: 2

RECNAME	RECADRESS
S MAHAJAN	116, A VIHAR
S TRIPATHI	13, B1 D, MAYUR VIHAR

viii) SELECT RECID, RECNAME FROM RECIPIENT WHERE SENDERID='MU02' OR SENDERID='ND50';

Number of Records: 2

RECID	RECNAME
ND08	S MAHAJAN
ND48	S TRIPATHI

QUESTION 4

Consider the following tables. Write SQL commands for the statements (i) to (iv).

TABLE : WORKER

Number of Records: 5

ECODE	NAME	DESIG	PLEVEL	DOJ	DOB
11	RADHE SHYAM	SUPERVISOR	P001	2004-09-13	1981-08-23
13	FIZZA	OPERATOR	P003	2009-06-16	1983-10-14
15	AMEEN AHMED	MECHANIC	P002	2006-08-21	1984-03-13
18	SANYA	CLERK	P002	2005-12-19	1983-06-09
12	CHANDER NATH	OPERATOR	P003	2010-02-22	1987-07-12

TABLE : PAYLEVEL

Number of Records: 3

PLEVEL	PAY	ALLOWANCE
P001	26000	12000
P002	22000	10000
P003	12000	6000

i) To display the details of all workers in descending order of DOB.
ii) To display the name and designation of workers, whose pay level is either P001 or P002.
iii) To display the content of all the workers table, whose DOB is between ’19 Jan 1984’ and ’18 Jan 1987’.
iv) To add a new row with the following :

19, ‘Daya Kishore’, ‘Operator’, ‘P003’, ’19-Jun-2008’, ’11-Jul-1984’.

CREATING TABLES

WORKERS

CREATE TABLE WORKERS (ECODE INTEGER, NAME CHAR(30), DESIG CHAR(20), PLEVEL VARCHAR(10), DOJ DATETIME, DOB DATETIME);

INSERT INTO WORKERS VALUES (11, 'RADHE SHYAM', 'SUPERVISOR', 'P001', '2004-09-13', '1981-08-23');
INSERT INTO WORKERS VALUES (12, 'CHANDER NATH', 'OPERATOR', 'P003', '2010-02-22', '1987-07-12');
INSERT INTO WORKERS VALUES (13, 'FIZZA', 'OPERATOR', 'P003', '2009-06-16', '1983-10-14');
INSERT INTO WORKERS VALUES (15, 'AMEEN AHMED', 'MECHANIC', 'P002', '2006-08-21', '1984-03-13');
INSERT INTO WORKERS VALUES (18, 'SANYA', 'CLERK', 'P002', '2005-12-19', '1983-06-09');

Number of Records: 5

ECODE	NAME	DESIG	PLEVEL	DOJ	DOB
11	RADHE SHYAM	SUPERVISOR	P001	2004-09-13	1981-08-23
13	FIZZA	OPERATOR	P003	2009-06-16	1983-10-14
15	AMEEN AHMED	MECHANIC	P002	2006-08-21	1984-03-13
18	SANYA	CLERK	P002	2005-12-19	1983-06-09
12	CHANDER NATH	OPERATOR	P003	2010-02-22	1987-07-12

PAYLEVEL

CREATE TABLE PAYLEVEL (PLEVEL VARCHAR(10), PAY INTEGER, ALLOWANCE INTEGER);

INSERT INTO PAYLEVEL VALUES ('P001', 26000, 12000);
INSERT INTO PAYLEVEL VALUES ('P002', 22000, 10000);
INSERT INTO PAYLEVEL VALUES ('P003', 12000, 6000);

Number of Records: 3

PLEVEL	PAY	ALLOWANCE
P001	26000	12000
P002	22000	10000
P003	12000	6000

ANSWERS

i) SELECT * FROM WORKERS ORDER BY DOB DESC;

Number of Records: 5

ECODE	NAME	DESIG	PLEVEL	DOJ	DOB
12	CHANDER NATH	OPERATOR	P003	2010-02-22	1987-07-12
15	AMEEN AHMED	MECHANIC	P002	2006-08-21	1984-03-13
13	FIZZA	OPERATOR	P003	2009-06-16	1983-10-14
18	SANYA	CLERK	P002	2005-12-19	1983-06-09
11	RADHE SHYAM	SUPERVISOR	P001	2004-09-13	1981-08-23

ii) SELECT NAME, DESIG FROM WORKERS WHERE PLEVEL='P002' OR PLEVEL='P001';

Number of Records: 3

NAME	DESIG
RADHE SHYAM	SUPERVISOR
AMEEN AHMED	MECHANIC
SANYA	CLERK

iii) SELECT * FROM WORKERS WHERE DOB BETWEEN '1984-01-19' AND '1987-01-18';

Number of Records: 1

ECODE	NAME	DESIG	PLEVEL	DOJ	DOB
15	AMEEN AHMED	MECHANIC	P002	2006-08-21	1984-03-13

iv) INSERT INTO WORKERS VALUES (19, 'DAYA KISHORE', 'OPERATOR', 'P003', '2008-06-19', '1984-07-11');

Number of Records: 6

ECODE	NAME	DESIG	PLEVEL	DOJ	DOB
11	RADHE SHYAM	SUPERVISOR	P001	2004-09-13	1981-08-23
13	FIZZA	OPERATOR	P003	2009-06-16	1983-10-14
15	AMEEN AHMED	MECHANIC	P002	2006-08-21	1984-03-13
18	SANYA	CLERK	P002	2005-12-19	1983-06-09
12	CHANDER NATH	OPERATOR	P003	2010-02-22	1987-07-12
19	DAYA KISHORE	OPERATOR	P003	2008-06-19	1984-07-11

QUESTION 5

Consider the following tables. Write SQL commands for the statement (a) to (f).

TABLE : FURNITURE

Number of Records: 10

NO	ITEMNAME	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
1	WHITE LOTUS	DOUBLE BED	2002-02-23	30000	25
2	PINK FEATHER	BABY COT	2002-01-20	7000	20
3	DOLPHIN	BABY COT	2002-02-19	9500	20
4	DECENT	OFFICE TABLE	2002-01-01	25000	30
5	COMFORT ZONE	DOUBLE BED	2002-01-12	25000	25
6	DONALD	BABY C0T	2002-02-24	6500	15
7	ROYAL FINISH	OFFICE TABLE	2002-02-20	18000	30
8	ROYAL TIGER	SOFA	2002-02-22	31000	30
9	ECONO SITTING	SOFA	2001-12-13	9500	25
10	EATING PARADISE	DINING TABLE	2002-02-19	11500	25

TABLE : ARRIVALS

Number of Records: 3

NO	ITEMNAME	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
11	WOOD COMFORT	DOUBLE BED	2003-03-23	25000	25
12	OLD FOX	SOFA	2003-02-20	17000	20
13	MICKY	BABY COT	2003-02-21	7500	15

a) To display the information about the baby cots from furniture table.
b) To display the item name which are price at more than 15000 from the furniture table.
c) To list item name and type of those items, in which date of stock is before 22/01/02 from the furniture table in descending order of item name.
d) To display the item name and date of stock of those items, in which the discount percentage is more than 25.
e) To count the number of items, whose type is sofa from furniture table.
f) To insert a new row in Arrivals table :

14, ‘Velvet touch’, ‘Double bed’, ’25/03/03’, 25000, 30

CREATING TABLES

FURNITURE

CREATE TABLE FURNITURE (NO INTEGER, ITEMNAME CHAR(30), TYPE CHAR(20), DATEOFSTOCK DATETIME, PRICE INTEGER, DISCOUNT INTEGER);

INSERT INTO FURNITURE VALUES (1, 'WHITE LOTUS', 'DOUBLE BED', '2002-02-23', 30000, 25);
INSERT INTO FURNITURE VALUES (2, 'PINK FEATHER', 'BABY COT', '2002-01-20', 7000, 20);
INSERT INTO FURNITURE VALUES (3, 'DOLPHIN', 'BABY COT', '2002-02-19', 9500, 20);
INSERT INTO FURNITURE VALUES (4, 'DECENT', 'OFFICE TABLE', '2002-01-01', 25000, 30);
INSERT INTO FURNITURE VALUES (5, 'COMFORT ZONE', 'DOUBLE BED', '2002-01-12', 25000, 25);
INSERT INTO FURNITURE VALUES (6, 'DONALD', 'BABY C0T', '2002-02-24', 6500, 15);
INSERT INTO FURNITURE VALUES (7, 'ROYAL FINISH', 'OFFICE TABLE', '2002-02-20', 18000, 30);
INSERT INTO FURNITURE VALUES (8, 'ROYAL TIGER', 'SOFA', '2002-02-22', 31000, 30);
INSERT INTO FURNITURE VALUES (9, 'ECONO SITTING', 'SOFA', '2001-12-13', 9500, 25);
INSERT INTO FURNITURE VALUES (10, 'EATING PARADISE', 'DINING TABLE', '2002-02-19', 11500, 25);

Number of Records: 10

NO	ITEMNAME	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
1	WHITE LOTUS	DOUBLE BED	2002-02-23	30000	25
2	PINK FEATHER	BABY COT	2002-01-20	7000	20
3	DOLPHIN	BABY COT	2002-02-19	9500	20
4	DECENT	OFFICE TABLE	2002-01-01	25000	30
5	COMFORT ZONE	DOUBLE BED	2002-01-12	25000	25
6	DONALD	BABY C0T	2002-02-24	6500	15
7	ROYAL FINISH	OFFICE TABLE	2002-02-20	18000	30
8	ROYAL TIGER	SOFA	2002-02-22	31000	30
9	ECONO SITTING	SOFA	2001-12-13	9500	25
10	EATING PARADISE	DINING TABLE	2002-02-19	11500	25

ARRIVALS

CREATE TABLE ARRIVALS (NO INTEGER, ITEMNAME CHAR(30), TYPE CHAR(20), DATEOFSTOCK DATETIME, PRICE INTEGER, DISCOUNT INTEGER);

INSERT INTO ARRIVALS VALUES (11, 'WOOD COMFORT', 'DOUBLE BED', '2003-03-23', 25000, 25);
INSERT INTO ARRIVALS VALUES (12, 'OLD FOX', 'SOFA', '2003-02-20', 17000, 20);
INSERT INTO ARRIVALS VALUES (13, 'MICKY', 'BABY COT', '2003-02-21', 7500, 15);

Number of Records: 3

NO	ITEMNAME	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
11	WOOD COMFORT	DOUBLE BED	2003-03-23	25000	25
12	OLD FOX	SOFA	2003-02-20	17000	20
13	MICKY	BABY COT	2003-02-21	7500	15

ANSWERS

a) SELECT * FROM FURNITURE WHERE TYPE='BABY COT';

Number of Records: 2

NO	ITEMNAME	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
2	PINK FEATHER	BABY COT	2002-01-20	7000	20
3	DOLPHIN	BABY COT	2002-02-19	9500	20

b) SELECT ITEMNAME FROM FURNITURE WHERE PRICE>15000;

Number of Records: 5

ITEMNAME
WHITE LOTUS
DECENT
COMFORT ZONE
ROYAL FINISH
ROYAL TIGER

c) SELECT ITEMNAME, TYPE FROM FURNITURE WHERE DATEOFSTOCK< '2002-01-22' ORDER BY ITEMNAME DESC;

Number of Records: 4

ITEMNAME	TYPE
PINK FEATHER	BABY COT
ECONO SITTING	SOFA
DECENT	OFFICE TABLE
COMFORT ZONE	DOUBLE BED

d) SELECT ITEMNAME, DATEOFSTOCK FROM FURNITURE WHERE DISCOUNT>25;

Number of Records: 3

ITEMNAME	DATEOFSTOCK
DECENT	2002-01-01
ROYAL FINISH	2002-02-20
ROYAL TIGER	2002-02-22

e) SELECT COUNT(TYPE) FROM FURNITURE WHERE TYPE='SOFA';

Number of Records: 1

COUNT(TYPE)
2

f) INSERT INTO ARRIVALS VALUES (14, 'VELVET TOUCH', 'DOUBLE BED', '2003-03-25', 25000, 30);

Number of Records: 4

NO	ITEMNAME	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
11	WOOD COMFORT	DOUBLE BED	2003-03-23	25000	25
12	OLD FOX	SOFA	2003-02-20	17000	20
13	MICKY	BABY COT	2003-02-21	7500	15
14	VELVET TOUCH	DOUBLE BED	2003-03-25	25000	30

QUESTION 6

Consider the following tables. Write SQL commands for the statement (i) to (iv).

TABLE : DOCTOR

Number of Records: 9

ID	NAME	DEPT	SEX	EXPERIENCE
101	JOHN	ENT	M	12
104	SMITH	ORTHOPEDIC	M	5
107	GEORGE	CARDIOLOGY	M	10
114	LARA	SKIN	F	3
109	K GEORGE	MEDICINE	F	9
105	JOHNSON	ORTHOPEDIC	M	10
117	LUCY	ENT	F	3
111	BILL	MEDICINE	F	12
130	MORPHY	ORTHOPEDIC	M	15

TABLE : SALARY

Number of Records: 7

ID	BASIC	ALLOWANCE	CONSULTATION
101	12000	1000	300
104	23000	2300	500
107	32000	4000	500
114	12000	5200	100
109	42000	1700	200
105	18900	1690	300
130	21700	2600	300

i) To display the name of all doctors who are in medicine and having more than 10 years experience from the table doctor.
ii) To display the average salary of all doctors working in ENT using the tables doctor and salary. Salary = basic + allowance.
iii) To display the minimum allowance of female doctors.
iv) To display the highest consultation fee among all male doctors.

CREATING TABLES

DOCTOR

CREATE TABLE DOCTOR (ID INTEGER, NAME CHAR(20), DEPT CHAR (20), SEX CHAR(1), EXPERIENCE INTEGER);

INSERT INTO DOCTOR VALUES (101, 'JOHN', 'ENT', 'M', 12);
INSERT INTO DOCTOR VALUES (104, 'SMITH', 'ORTHOPEDIC', 'M', 5);
INSERT INTO DOCTOR VALUES (107, 'GEORGE', 'CARDIOLOGY', 'M', 10);
INSERT INTO DOCTOR VALUES (114, 'LARA', 'SKIN', 'F', 3);
INSERT INTO DOCTOR VALUES (109, 'K GEORGE', 'MEDICINE', 'F', 9);
INSERT INTO DOCTOR VALUES (105, 'JOHNSON', 'ORTHOPEDIC', 'M', 10);
INSERT INTO DOCTOR VALUES (117, 'LUCY', 'ENT', 'F',3);
INSERT INTO DOCTOR VALUES (111, 'BILL', 'MEDICINE', 'F', 12);
INSERT INTO DOCTOR VALUES (130, 'MORPHY', 'ORTHOPEDIC', 'M', 15);

Number of Records: 9

ID	NAME	DEPT	SEX	EXPERIENCE
101	JOHN	ENT	M	12
104	SMITH	ORTHOPEDIC	M	5
107	GEORGE	CARDIOLOGY	M	10
114	LARA	SKIN	F	3
109	K GEORGE	MEDICINE	F	9
105	JOHNSON	ORTHOPEDIC	M	10
117	LUCY	ENT	F	3
111	BILL	MEDICINE	F	12
130	MORPHY	ORTHOPEDIC	M	15

SALARY

CREATE TABLE SALARY (ID INTEGER, BASIC INTEGER, ALLOWANCE INTEGER, CONSULTATION INTEGER);

INSERT INTO SALARY VALUES (101, 12000, 1000, 300);
INSERT INTO SALARY VALUES (104, 23000, 2300, 500);
INSERT INTO SALARY VALUES (107, 32000, 4000, 500);
INSERT INTO SALARY VALUES (114, 12000, 5200, 100);
INSERT INTO SALARY VALUES (109, 42000, 1700, 200);
INSERT INTO SALARY VALUES (105, 18900, 1690, 300);
INSERT INTO SALARY VALUES (130, 21700, 2600, 300);

Number of Records: 7

ID	BASIC	ALLOWANCE	CONSULTATION
101	12000	1000	300
104	23000	2300	500
107	32000	4000	500
114	12000	5200	100
109	42000	1700	200
105	18900	1690	300
130	21700	2600	300

ANSWERS

i) SELECT NAME FROM DOCTOR WHERE DEPT='MEDICINE' AND EXPERIENCE>10;

Number of Records: 1

NAME
BILL

ii) SELECT NAME, AVG(BASIC+ALLOWANCE) FROM SALARY, DOCTOR WHERE SALARY.ID=DOCTOR.ID AND DEPT='ENT' GROUP BY SALARY.ID;

Number of Records: 1

NAME	AVG(BASIC+ALLOWANCE)
JOHN	13000

iii) SELECT NAME, MIN(ALLOWANCE) FROM DOCTOR, SALARY WHERE SEX='F' AND SALARY.ID=DOCTOR.ID;

Number of Records: 1

NAME	MIN(ALLOWANCE)
K GEORGE	1700

iv) SELECT NAME, MAX(CONSULTATION) FROM SALARY, DOCTOR WHERE SEX='M' AND SALARY.ID=DOCTOR.ID;

Number of Records: 1

NAME	MAX(CONSULTATION)
SMITH	500

QUESTION 7

Consider the following tables. Write SQL commands for the statement (i) to (iv).

TABLE : EMPLOYEES

Number of Records: 9

EMPID	FIRSTNAME	LASTNAME	ADDRESS	CITY
010	GEORGE	SMITH	83 FIRST STREET	HOWARD
105	MARY	JONES	842 VINE AVENUE	LOSANTIVILLE
152	SAM	TONES	33 ELM ST	PARIS
215	SARAH	ACKERMAN	440 US 110	UPTON
244	MANILA	SENGUPTA	24 FRIENDS STREET	NEW DELHI
300	ROBERT	SAMUEL	9 FIFTH CROSS	WASHINGTON
335	HENRY	WILLIAMS	12 MOORE STREET	BOSTON
400	RACHEL	LEE	121 HARRISON ST	NEW YORK
441	PETER	THOMPSON	11 RED ROAD	PARIS

TABLE : EMPSALARY

Number of Records: 9

EMPID	SALARY	BENEFITS	DESIGNATION
010	75000	15000	MANAGER
105	65000	15000	MANAGER
152	80000	25000	DIRECTOR
215	75000	12500	MANAGER
244	50000	12000	CLERK
300	45000	10000	CLERK
335	40000	10000	CLERK
400	32000	7500	SALESMAN
441	28000	7500	SALESMAN

i) To display the first name, last name, address and city of all employees living in Paris.
ii) To display the content of employees table in descending order of first name.
iii) To display the first name, last name, and total salary of all managers from the tables employees and empsalary where total salary is salary is salary + benefits.
iv) To display the maximum salary among managers and clerks.

CREATING TABLES

EMPLOYEES

CREATE TABLE EMPLOYEES (EMPID CHAR(5), FIRSTNAME CHAR(20), LASTNAME CHAR(20), ADDRESS VARCHAR(30), CITY CHAR(20));

INSERT INTO EMPLOYEES VALUES (‘010’, 'GEORGE', 'SMITH', '83 FIRST STREET', ‘HOWARD');
INSERT INTO EMPLOYEES VALUES ('105', 'MARY', 'JONES', '842 VINE AVENUE', 'LOSANTIVILLE');
INSERT INTO EMPLOYEES VALUES ('152', 'SAM', 'TONES', '33 ELM ST', 'PARIS');
INSERT INTO EMPLOYEES VALUES ('215', 'SARAH', 'ACKERMAN', '440 US 110', 'UPTON');
INSERT INTO EMPLOYEES VALUES ('244', 'MANILA', 'SENGUPTA', '24 FRIENDS STREET', 'NEW DELHI');
INSERT INTO EMPLOYEES VALUES ('300', 'ROBERT', 'SAMUEL', '9 FIFTH CROSS', 'WASHINGTON');
INSERT INTO EMPLOYEES VALUES ('335', 'HENRY', 'WILLIAMS', '12 MOORE STREET', 'BOSTON');
INSERT INTO EMPLOYEES VALUES ('400', 'RACHEL', 'LEE', '121 HARRISON ST', 'NEW YORK');
INSERT INTO EMPLOYEES VALUES ('441', 'PETER', 'THOMPSON', '11 RED ROAD', 'PARIS');

Number of Records: 9

EMPID	FIRSTNAME	LASTNAME	ADDRESS	CITY
010	GEORGE	SMITH	83 FIRST STREET	HOWARD
105	MARY	JONES	842 VINE AVENUE	LOSANTIVILLE
152	SAM	TONES	33 ELM ST	PARIS
215	SARAH	ACKERMAN	440 US 110	UPTON
244	MANILA	SENGUPTA	24 FRIENDS STREET	NEW DELHI
300	ROBERT	SAMUEL	9 FIFTH CROSS	WASHINGTON
335	HENRY	WILLIAMS	12 MOORE STREET	BOSTON
400	RACHEL	LEE	121 HARRISON ST	NEW YORK
441	PETER	THOMPSON	11 RED ROAD	PARIS

EMPSALARY

CREATE TABLE EMPSALARY (EMPID CHAR(5), SALARY INTEGER, BENEFITS INTEGER, DESIGNATION CHAR(20));

INSERT INTO EMPSALARY VALUES ('010', 75000, 15000, ‘MANAGER');
INSERT INTO EMPSALARY VALUES ('105', 65000, 15000, ‘MANAGER');
INSERT INTO EMPSALARY VALUES ('152', 80000, 25000, ‘DIRECTOR');
INSERT INTO EMPSALARY VALUES ('215', 75000, 12500, ‘MANAGER');
INSERT INTO EMPSALARY VALUES ('244', 50000, 12000, ‘CLERK');
INSERT INTO EMPSALARY VALUES ('300', 45000, 10000, ‘CLERK');
INSERT INTO EMPSALARY VALUES ('335', 40000, 10000, ‘CLERK');
INSERT INTO EMPSALARY VALUES ('400', 32000, 7500, ‘SALESMAN');
INSERT INTO EMPSALARY VALUES ('441', 28000, 7500, ‘SALESMAN');

Number of Records: 9

EMPID	SALARY	BENEFITS	DESIGNATION
010	75000	15000	MANAGER
105	65000	15000	MANAGER
152	80000	25000	DIRECTOR
215	75000	12500	MANAGER
244	50000	12000	CLERK
300	45000	10000	CLERK
335	40000	10000	CLERK
400	32000	7500	SALESMAN
441	28000	7500	SALESMAN

ANSWERS

i) SELECT FIRSTNAME, LASTNAME, ADDRESS, CITY FROM EMPLOYEES WHERE CITY='PARIS';

Number of Records: 2

FIRSTNAME	LASTNAME	ADDRESS	CITY
SAM	TONES	33 ELM ST	PARIS
PETER	THOMPSON	11 RED ROAD	PARIS

ii) SELECT * FROM EMPLOYEES ORDER BY FIRSTNAME DESC;

Number of Records: 9

EMPID	FIRSTNAME	LASTNAME	ADDRESS	CITY
215	SARAH	ACKERMAN	440 US 110	UPTON
152	SAM	TONES	33 ELM ST	PARIS
300	ROBERT	SAMUEL	9 FIFTH CROSS	WASHINGTON
400	RACHEL	LEE	121 HARRISON ST	NEW YORK
441	PETER	THOMPSON	11 RED ROAD	PARIS
105	MARY	JONES	842 VINE AVENUE	LOSANTIVILLE
244	MANILA	SENGUPTA	24 FRIENDS STREET	NEW DELHI
335	HENRY	WILLIAMS	12 MOORE STREET	BOSTON
010	GEORGE	SMITH	83 FIRST STREET	HOWARD

iii) SELECT FIRSTNAME, LASTNAME, SALARY+BENEFITS FROM EMPLOYEES, EMPSALARY WHERE EMPSALARY.EMPID=EMPLOYEES.EMPID AND DESIGNATION='MANAGER';

Number of Records: 3

FIRSTNAME	LASTNAME	SALARY+BENEFITS
GEORGE	SMITH	90000
MARY	JONES	80000
SARAH	ACKERMAN	87500

iv) SELECT DESIGNATION, MAX(SALARY+BENEFITS) FROM EMPSALARY WHERE DESIGNATION='MANAGER' OR DESIGNATION='CLERK' GROUP BY DESIGNATION;

Number of Records: 2

DESIGNATION	MAX(SALARY+BENEFITS)
CLERK	62000
MANAGER	90000