

NAME: SUMEET KARBHARI

SQL QUERY:

```
CREATE TABLE Manufacturers (  
    Code INTEGER,  
    Name VARCHAR(255) NOT NULL,  
    PRIMARY KEY (Code)  
);
```

```
INSERT INTO Manufacturers(Code,Name) VALUES(1,'Sony');  
INSERT INTO Manufacturers(Code,Name) VALUES(2,'Creative Labs');  
INSERT INTO Manufacturers(Code,Name) VALUES(3,'Hewlett-Packard');  
INSERT INTO Manufacturers(Code,Name) VALUES(4,'Iomega');  
INSERT INTO Manufacturers(Code,Name) VALUES(5,'Fujitsu');  
INSERT INTO Manufacturers(Code,Name) VALUES(6,'Winchester');
```

```
SELECT * FROM MANUFACTURERS;
```

```
CREATE TABLE Products (  
    Code INTEGER,  
    Name VARCHAR(255) NOT NULL ,  
    Price DECIMAL NOT NULL ,  
    Manufacturer INTEGER NOT NULL,  
    PRIMARY KEY (Code),  
    FOREIGN KEY (Manufacturer) REFERENCES Manufacturers(Code)  
);
```

```
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(1,'Hard drive',240,5);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(2,'Memory',120,6);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(3,'ZIP drive',150,4);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(4,'Floppy disk',5,6);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(5,'Monitor',240,1);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(6,'DVD drive',180,2);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(7,'CD drive',90,2);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(8,'Printer',270,3);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(9,'Toner cartridge',66,3);  
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(10,'DVD burner',180,2);
```

```
SELECT * FROM PRODUCTS;
```

/\*qn01\*/

```
select name from products;
```

/\*qno2\*/

select name,price from products;

/\*qno3\*/

select name from products where price<=200;

/\*qn4\*/

select \* from products where price between 60 and 120;

/\*qno5\*/

select name, price\*100 as "Cents Price" from products;

/\*qno6\*/

select avg(price) as "Average Price" from products;

/\*qno7\*/

select avg(price) as "Average Price" from products where manufacturer=2;

/\*qno8\*/

select count(\*) from products where price>=180;

/\*qno9

Select the name and price of all products with a price larger than or equal to \$180, and sort first by price (in descending order), and then by name (in ascending order).\*/

SELECT NAME,PRICE FROM PRODUCTS WHERE PRICE>=180 ORDER BY PRICE DESC,  
NAME ASC;

/\*qno10

- 1.10 Select all the data from the products, including all the data for each product's manufacturer.\*/

SELECT P.NAME,P.PRICE, P.MANUFACTURER, M.NAME  
FROM PRODUCTS P FULL OUTER join Manufacturers M  
ON p.manufacturer = M.CODE;

/\*qno11\*

Select the product name, price, and manufacturer name of all the products.\*/

SELECT P.NAME,P.PRICE,M.NAME  
FROM PRODUCTS P LEFT JOIN manufacturers M  
ON p.manufacturer= M.CODE;

/\*qno12

Select the average price of each manufacturer's products, showing only the manufacturer's code.\*/

select temp.check1,manufacturers.code  
from manufacturers

```

left join
(
SELECT manufacturer,avg(price)as check1
from products
group by manufacturer
)temp
on
manufacturers.code= temp.manufacturer;

```

/\*qno13

Select the average price of each manufacturer's products, showing the manufacturer's name.\*/

```

select temp.check1,manufacturers.name
from manufacturers
left join
(
SELECT manufacturer,avg(price)as check1
from products
group by manufacturer
)temp
on
manufacturers.code= temp.manufacturer;

```

/\*qno 14

Select the names of manufacturer whose products have an average price larger than or equal to \$150.\*/

```

select manufacturers.name from manufacturers
inner join
(

```

```

SELECT manufacturer,
AVG(PRICE) FROM PRODUCTS
GROUP BY MANUFACTURER
HAVING AVG(PRICE)>=150)temp
on
manufacturers.code = temp.manufacturer;

```

/\*qno15

Select the name and price of the cheapest product.\*/

```

select name ,price from products where price=(select min(price) from products );

```

/\*qno16

Select the name of each manufacturer along with the name and price of its most expensive product.\*/

SELECT MANUFACTURERS.NAME,TEMP.PRICE1

FROM manufacturers

left join

(

SELECT MANUFACTURER,MAX(PRICE) AS PRICE1 FROM PRODUCTS GROUP BY  
MANUFACTURER

)TEMP

ON

MANUFACTURERS.CODE= TEMP.manufacturer;

SELECT MANUFACTURER,MAX(PRICE) FROM PRODUCTS GROUP BY MANUFACTURER;

/\*qno17\*

Add a new product: Loudspeakers, \$70, manufacturer 2.\*/

INSERT INTO PRODUCTS VALUES(11,'Loudspeakers',70,2);

select \* from products;

/\*qno18

Update the name of product 8 to "Laser Printer".\*/

UPDATE products

SET name='Laser Printer'

WHERE code=8;

select \* from products;

/\*qno19\*/

select name, (price\*0.9) as "Added Price", manufacturer from products;

/\*qno20\*

Apply a 10% discount to all products with a price larger than or equal to \$120.\*/

select name,(price\*0.9) as "Added Price", manufacturer from products where price>=120;

