```sql
--GURUNATH DESHUMUKH

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

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)
);

—inserting values
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');

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);




--1.1
SELECT name from products;

--1.2
SELECT name,price FROM products;

--1.3
SELECT name FROM products WHERE price<200;
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--1.4
SELECT name FROM products WHERE price BETWEEN 60 AND 120;

--1.5
SELECT name,price*100 AS "Price in Cents" FROM products;

--1.6
SELECT AVG(price) FROM products;

--1.7
SELECT AVG(price) FROM products WHERE manufacturer = 2;

--1.8
SELECT COUNT(*) FROM products;

--1.9
SELECT Code,Name,Price,Manufacturer FROM products WHERE price>=180 ORDER BY
price DESC, name;

--1.10
SELECT p.name,p.price,m.code,m.name FROM products  p LEFT OUTER JOIN
manufacturers m ON (p.manufacturer = m.code);

--1.11
SELECT p.name,p.price,m.name FROM products  p LEFT OUTER JOIN manufacturers m
ON (p.manufacturer = m.code);

--1.12
SELECT Manufacturers.code,temp.pri FROM Manufacturers LEFT JOIN (
SELECT Manufacturer,AVG(price) as pri
FROM products GROUP BY Manufacturer ) temp ON
Manufacturers.code=temp.Manufacturer;

--1.13
select manufacturers.name from manufacturers
inner join
(
SELECT manufacturer,
AVG(PRICE) FROM PRODUCTS
GROUP BY MANUFACTURER)temp
on
manufacturers.code = temp.manufacturer;

--1.14
select manufacturers.name from manufacturers
inner join
(
SELECT manufacturer,
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AVG(PRICE) FROM PRODUCTS
GROUP BY MANUFACTURER
HAVING AVG(PRICE)>=150)temp
on
manufacturers.code = temp.manufacturer;

--1.15
SELECT MIN(price) FROM products ;

--1.16
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;

--1.17
INSERT INTO Products(Code,Name,Price,Manufacturer) VALUES(11,'Loudspeakers',70,2);

--1.18
UPDATE products SET name='Laser Printer' WHERE code=8;

--1.19
SELECT code,name,price*0.9,manufacturer FROM products;

--1.20
SELECT code,name,price*0.9,manufacturer FROM products WHERE price>=120;
```