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01.

```
Create database business;

use business;

create table customer(
        c_id varchar(5) primary key,
        name varchar(10),
        address varchar(20),
        contact varchar(10),
        email varchar(30)
);



create table material(
        m_id varchar(5) primary key,
        name varchar(15),
        sellingPrice varchar(10),
        buyingPrice varchar(10),
        qtyOnHand varchar(5),
        packSize varchar(5)
);



create table project(
        p_id varchar(5) primary key,
        c_id varchar(5),
        estimatedValue decimal(15,2),
        startDate date,
        endDate date,
```

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```
        foreign key(c_id) references customer(c_id) on update cascade on delete
        cascade
);



create table project_meterial(
        p_id varchar(5),
        m_id varchar(5),
        date date,
        qty varchar(5),
        foreign key(p_id)  references project(p_id) on update cascade on delete
        cascade,
        foreign key(m_id) references material(m_id) on update cascade on delete
        cascade
);
```

02.

```
insert  into customer values('C01', 'Nimal', 'No:20,Galle','0772266363' ,
'Nimal@yahoo.com');

insert  into customer
values('C02','sasanka','No:30,Galle','0736636636','Sas@yahoo.com');

insert  into customer
values('C03','Lakshan','No:39','0772737377','Laks@ijse.lk');

insert  into customer values('C04',' Mohan',' No:90, Galle','0773664772',
'Mohan@ijse.lk');
```

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```
insert into material values('M01',' Cement-mer',' 700.00',' 625.00',' 40', '50kg');
insert into material values('M02',' Cement-mah','750.00','650.00',' 50', '50kg');
insert into material values('M03','Sand','2500.00','2350.00','25',' Cube');
insert into material values('M04',' Coil',' 2400.00',' 2300.00',' 80',' Rim');
```

```
insert into project values('P01','C01','60000000.00','2013-01-01','2014-01-01');
insert into project values('P02','C01','45000000.00','2013-02-01','2014-04-20');
insert into project values('P03','C02','36000000.00','2013-03-01','2014-01-20');
insert into project values('P04','C03','23000000.00','2015-04-01','2015-04-02');
```

```
insert into project_meterial values('P01','M01','2013-03-01',' 5');
insert into project_meterial values('P01','M03','2013-03-03',' 1');
insert into project_meterial values('P02','M01','2013-04-04',' 1');
```

03.

```
SELECT DISTINCT C.c_id, C.Name
FROM customer C
JOIN project P ON C.c_id = P.c_id;
```

04.

05.

```
SELECT C.c_id, C.Name
```

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```
FROM customer C
JOIN project P ON C.c_id = P.c_id
GROUP BY C.c_id, C.Name
HAVING SUM(P.estimatedValue ) > 50000000.00;
```

06.

07.

```
UPDATE project
SET estimatedValue = estimatedValue * 1.10
WHERE YEAR(startDate) = 2015;
```

Part 2

1.

```
SELECT C.c_id, C.Name, SUM(P.estimatedValue) AS TotalCost
FROM customer C
LEFT JOIN project P ON C.c_id = P.c_id
GROUP BY C.c_id, C.Name;
```

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02.

```
SELECT P.p_id, SUM(M.sellingPrice * PMD.Qty) AS materialCost
FROM Project P
JOIN project_meterial PMD ON P.p_id = PMD.p_id
JOIN Material M ON PMD.m_id = M.m_id
GROUP BY P.p_id;
```