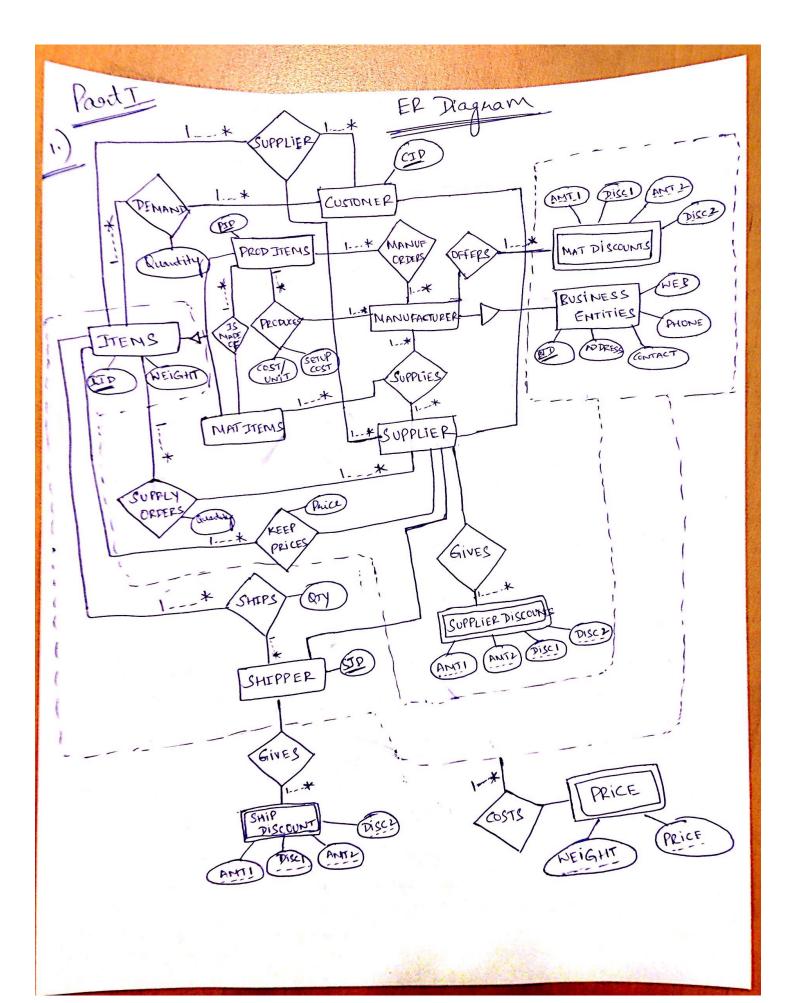
Semester Project-CS550-002-Database Systems

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Part 1.
2.)
CREATE TABLE items (
     item id varchar(20),
     unitWeight integer(5),
     primary key (item id)
);
CREATE TABLE bussiness Entities (
     id varchar(20),
     address varchar (50),
     phone varchar(20),
     web varchar(50),
     contact varchar(20),
     primary key (id)
);
CREATE TABLE supplier Discounts (
     supplier id varchar(20),
     amt1 decimal(8,4),
     disc1 decimal(3,2),
     amt2 decimal(8,4),
     disc2 \ decimal(3,2),
     primary key (supplier id),
     foreign key (supplier id) references bussiness_Entities (id)
);
CREATE TABLE Supply Item Pricing(
     supplier id varchar(20),
     item id varchar(20),
     price integer (5),
     weight integer (5),
     primary key (supplier id, item id),
     foreign key (supplier id) references bussiness Entities (id) on
delete cascade,
     foreign key (item id) references items(item id) on delete cascade
);
CREATE TABLE manuf Discounts(
     manuf id varchar(20),
     amt1 decimal(8,4),
     disc1 decimal(3,2),
        amt2 decimal(8,4),
     disc2 \ decimal(3,2),
     primary key (manuf_id),
     foreign key (manuf id) references bussiness Entities (id) on delete
cascade
);
CREATE TABLE customerDemand(
     customer id varchar(20),
     item id varchar(20),
     qty integer (5),
     primary key(customer id, item id),
     foreign key(item id) references items on delete cascade,
     foreign key (customer id) references bussiness Entities (id) on
delete cascade
```

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);
CREATE TABLE supplyOrders (
     item id varchar(20),
     supplier id varchar(20),
     qty integer (5),
     primary key(item id, supplier id),
     foreign key(item id) references items on delete cascade,
     foreign key(supplier id) references supplier Discounts on delete
cascade
);
CREATE TABLE manufOrders (
     item id varchar(20),
     manuf id varchar(20),
     qty integer (5),
     primary key(item_id, manuf_id),
     foreign key(item id) references items on delete cascade,
     foreign key(manuf id) references manuf Discounts on delete cascade
);
CREATE TABLE manuf Produce
     item id varchar(20),
     manuf id varchar(20),
     SetUpCost integer (5),
     CostPerItem integer (5),
     primary key (item id, manuf id),
     foreign key(item id) references items(item id) on delete cascade,
     foreign key(manuf id) references bussiness Entities (id) on delete
cascade
);
CREATE TABLE manuf Supply
     item id varchar(20),
     manuf_id varchar(20),
     supplier_id varchar(20),
     Qty integer (5),
     primary key (item id, manuf id, supplier id),
     foreign key(item id) references items(item id),
     foreign key(manuf id) references bussiness Entities (id) on delete
     foreign key(supplier id) references bussiness Entities (id) on
delete cascade
);
CREATE TABLE ShipperDiscount
     shipper id varchar(20),
     amt1 decimal(8,4),
     disc1 \ decimal(3,2),
        amt2 decimal(8,4),
     disc2 \ decimal(3,2),
     primary key (shipper id)
);
CREATE TABLE ShipPricingItem
     item id varchar(20),
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shipper id varchar(20),
     sender \overline{id} varchar(20),
     recipient_id varchar(20),
     Weight Integer(5),
     Price Integer(5),
     primary key(item id, shipper id, sender id, recipient id ),
     foreign key(item id) references items(item id) on delete cascade,
     foreign key(shipper id) references ShipperDiscount (shipper id) on
delete cascade,
     foreign key(sender id) references bussiness Entities (id) on delete
cascade,
     foreign key(recipient id) references bussiness Entities (id) on
delete cascade
);
CREATE TABLE supplyCustomer(
     item id varchar(20),
     supplier id varchar(20),
     Customer id varchar(20),
     qty integer (5),
     primary key(item_id, supplier_id, customer_id),
     foreign key(item id) references items,
     foreign key(supplier id) references supplier Discounts,
     foreign key(Customer id) references bussiness Entities (id) on
delete cascade
);
```