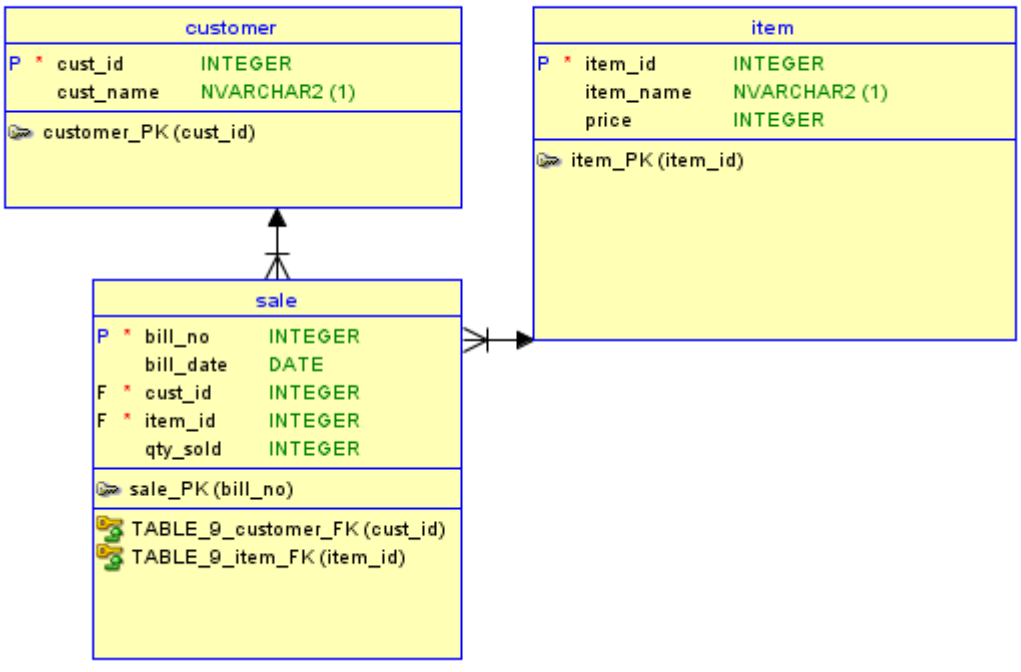
DATA MODEL FAMILIARISATION

Use Data Modeler to design a Database schema for a customer-sale scenario as shown below.

customer(cust_id,cust_name) primary key(cust_id).

Item(item_id,item_name,price) primary key(item_id)

Sale(bill_no,bill_date,cust_id,item_id,qty_sold) primary key(bill_no),foreign key(cust_id),foreign key(item_id).



Find

a. Create the tables using data modeler .

Insert around 10 records in each of the tables.

```
SQL> select * from customer;

   CUST_ID CUST_NAME
---------- ----------
         1 susan
         2 alu
         3 summaya
         4 annu
         5 sree
         6 rosh
         7 milu
         8 reebs
         9 steffy
        10 zameel

10 rows selected.
```

```
SQL> select * from item;

   ITEM_ID ITEM_NAME       PRICE
---------- ---------- ----------
         1 jam                50
         2 bread              50
         3 nutella           200
         4 icecream          400
         5 lipstick          300
         6 shoe              600
         7 shirt             400
         8 eyeliner           30
         9 watch             650
        10 keyboard         1000

10 rows selected.
```

```
SQL> select * from sale;

   BILL_NO BILL_DATE    CUST_ID    ITEM_ID   QTY_SOLD
---------- --------- ---------- ---------- ----------
         1 13-NOV-21          1          1          3
         2 12-DEC-21          1          1          4
         3 09-FEB-20          3          3          5
         4 29-DEC-01          4          4          1
         5 31-JAN-19          5          5          8
         6 02-APR-99          6          6          2
         7 22-FEB-22          7          7          7
         8 19-DEC-22          8          8          3
         9 26-OCT-20          9          9          1
        10 01-JAN-01         10         10          7

10 rows selected.
```

b. List all the bills for the current date with the customer name and item_no.

```
SQL> select bill_no , bill_date ,cust_name,item_id,qty_sold from sale join customer on   customer.cust_id=sale.cust_id where bill_date ='11-nov-2022';

no rows selected
```

c. List the total bill detail with the quantity sold, price of the item and final amount.

```
SQL> select bill_no , bill_date ,cust_id,sale.item_id,qty_sold ,qty_sold * item.price as total FROM sale join item on sale.item_id=item.item_id;

   BILL_NO BILL_DATE    CUST_ID    ITEM_ID   QTY_SOLD      TOTAL
---------- --------- ---------- ---------- ---------- ----------
         1 13-NOV-21          1          1          3        150
         2 12-DEC-21          1          1          4        200
         3 09-FEB-20          3          3          5       1000
         4 29-DEC-01          4          4          1        400
         5 31-JAN-19          5          5          8       2400
         6 02-APR-99          6          6          2       1200
         7 22-FEB-22          7          7          7       2800
         8 19-DEC-22          8          8          3         90
         9 26-OCT-20          9          9          1        650
        10 01-JAN-01         10         10          7       7000

10 rows selected.
```

d. List the details of the customer who have brought a product which has price>200.

```
SQL>  select distinct(customer.cust_id),cust_name from customer join sale on sale.cust_id=customer.cust_id where sale.item_id in (select item_id from item where price>2
00);

   CUST_ID CUST_NAME
---------- ----------
         4 annu
         6 rosh
         5 sree
        10 zameel
         9 steffy
         7 milu

6 rows selected.
```

e. Give a count of how many product have been brought by each customer.

```
SQL> select cust_id,count(distinct(item_id)) as qty_prod from sale group by cust_id;

   CUST_ID   QTY_PROD
---------- ----------
         1          1
         6          1
         5          1
         4          1
         8          1
         3          1
         7          1
         9          1
        10          1

9 rows selected.
```

f. Give a list of product brought by a customer having cust_id 5.

```
SQL>  select i.item_id,i.item_name,i.price from item i join sale s on s.item_id=i.item_id where s.cust_id=5;

   ITEM_ID ITEM_NAME       PRICE
---------- ---------- ----------
         5 lipstick          300
```

g. List the item details which are sold as of today.

```
SQL>  select distinct(i.item_id),i.item_name,i.price from item i join sale s on  i.item_id=s.item_id where s.bill_date='11-nov-2022' order by i.item_id;

no rows selected
```