***ASSIGNMENT:07***

**DATE:** 24/01/2019

**Using the following tables write SQL queries:**

**TABLE1:** **CUSTOMER (CUSTNO, CUSTNAME, CITY, PHONE)**

**TABLE2: ITEM (ITEMNO, ITEMNAME, ITEMPRICE,** **QUANTITY)**

**TABLE3: INVOICE (INVNO, INVDATE, CUSTNO)**

**TABLE4: INVITEM (INVNO, ITEMNO, INVQUANTITY)**

**ENTITY:** CUSTOMER

**ATTRIBUTE:** CUSTNO, CUSTNAME, CITY, PHONE

**PRIMARY KEY:** CUSTNO

**ENTITY:** ITEM

**ATTRIBUTE:** ITEMNO, ITEMNAME, ITEMPRICE, QUANTITY

**PRIMARY KEY:** ITEMNO

**ENTITY:** INVOICE

**ATTRIBUTE:** INVNO, INVDATE, CUSTNO

**FOREIGN KEY:** CUSTNO references **CUSTOMER**

**ENTITY:** INVITEM

**ATTRIBUTE:** INVNO, ITEMNO, INVQUANTITY

**FOREIGN KEY:** CUSTNO references **CUSTOMER**

ITEMNO references **ITEM**

|  |
| --- |
| **CUSTOMER** |
| CUSTNO |
| CUSTNAME |
| CITY |
| PHONE |

|  |
| --- |
| **INVOICE** |
| INVNO |
| INVDATE |
| CUSTNO |

|  |
| --- |
| **ITEM** |
| ITEMNO |
| ITEMNAME |
| ITEMPRICE |
| QUANTITY |

|  |
| --- |
| **INVITEM** |
| INVNO |
| ITEMNO |
| INVQUANTITY |

**TABLE1:** **CUSTOMER**

**CREATE TABLE**

CREATE TABLE CUSTOMER(

CUSTNO NUMBER(2) PRIMARY KEY,

CUSTNAME VARCHAR2(20),

CITY VARCHAR2(20),

PHONE NUMBER(10)

);

DESC CUSTOMER;

NAME NULL? TYPE

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CUSTNO NOT NULL NUMBER(2)

CUSTNAME VARCHAR2(20)

CITY VARCHAR2(20)

PHONE NUMBER(10)

**DATA INSERTION INTO TABLE**

INSERT INTO PERSON

VALUES(&CUSTNO,'&CUSTNAME','&CITY',&PHONE);

**RECORD STORED IN TABLE**

SELECT \* FROM CUSTOMER;

CUSTNO CUSTNAME CITY PHONE

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10 A. PAUL BARASHAT 9830000011

11 S. GHOSH MAJHERHAT 9840045012

12 D. DEY SHYAMNAGAR 9850120013

13 P. SAHA SHYAMNAGAR 9860333014

14 A. ROY KOLKATA 9830154015

**TABLE2:** **ITEM**

**CREATE TABLE**

CREATE TABLE ITEM(

ITEMNO NUMBER(3) PRIMARY KEY,

ITEMNAME VARCHAR2(10),

ITEMPRICE NUMBER(4),

QUANTITY NUMBER(3)

);

DESC ITEM;

NAME NULL? TYPE

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ITEMNO NOT NULL NUMBER(3)

ITEMNAME VARCHAR2(10)

ITEMPRICE NUMBER(4)

QUANTITY NUMBER(3)

**DATA INSERTION INTO TABLE**

INSERT INTO ITEM

VALUES(&ITEMNO,'&ITEMNAME',&ITEMPRICE,&QUANTITY);

**RECORD STORED IN TABLE**

SELECT \* FROM ITEM;

ITEMNO ITEMNAME ITEMPRICE QUANTITY

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101 TABLE 2000 2

102 CHAIR 500 1

103 MIRROR 2500 3

104 FRAME 200 2

105 TABLE 2000 5

**TABLE3:** **INVOICE**

**CREATE TABLE**

CREATE TABLE INVOICE(

INVNO NUMBER(3) PRIMARY KEY,

INVDATE DATE,

CUSTNO NUMBER(2),

FOREIGN KEY (CUSTNO) REFERENCES CUSTOMER ON DELETE CASCADE

);

DESC INVOICE;

NAME NULL? TYPE

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INVNO NOT NULL NUMBER(3)

INVDATE DATE

CUSTNO NOT NULL NUMBER(2)

**DATA INSERTION INTO TABLE**

INSERT INTO SECTION OWN (&INVNO,'&INVDATE',&CUSTNO);

**RECORD STORED IN TABLE**

SELECT \* FROM INVOICE;

INVNO INVDATE CUSTNO

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111 15-DEC-18 11

123 23-JUL-17 13

114 21-JUN-15 12

115 30-DEC-17 14

121 16-JUN-17 10

**TABLE4:** **INVITEM**

**CREATE TABLE**

CREATE TABLE INVITEM(

INVNO NUMBER(3),

ITEMNO NUMBER(3),

INVQUANTITY NUMBER(3),

FOREIGN KEY (INVNO) REFERENCES INVOICE ON DELETE CASCADE,

FOREIGN KEY (ITEMNO) REFERENCES ITEM ON DELETE CASCADE

);

DESC INVITEM;

NAME NULL? TYPE

----------------------------- ------------- -----------------

INVNO NOT NULL NUMBER(3)

ITEMNO NOT NULL NUMBER(3)

INVQUANTITY NUMBER(3)

**DATA INSERTION INTO TABLE**

INSERT INTO INVITEM

VALUES(&INVNO,&ITEMNO,&INVQUANTITY);

**RECORD STORED IN TABLE**

SELECT \* FROM INVITEM;

ITEMNAME INVQUANTITY

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TABLE 3

CHAIR 4

MIRROR 3

FRAME 5

TABLE 6

**QUERY 1: DISPLAY ALL THE ITEM NAME ALONG WITH THE QUANTITY SOLD.**

SELECT ITEMNAME,INVQUANTITY

FROM ITEM,INVITEM WHERE ITEM.ITEMNO=INVITEM.ITEMNO;

**OUTPUT:**

ITEMNAME INVQUANTITY

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TABLE 3

CHAIR 4

MIRROR 3

FRAME 5

TABLE 6

**QUERY 2: DISPLAY INVOICES, CUSTOMER NAME AND ITEM NAME TOGETHER.**

SELECT INVITEM.INVNO,CUSTNAME,ITEMNAME

FROM INVOICE,ITEM,CUSTOMER,INVITEM

WHERE INVOICE.INVNO=INVITEM.INVNO

AND INVITEM.ITEMNO=ITEM.ITEMNO AND INVOICE.CUSTNO=CUSTOMER.CUSTNO;

**OUTPUT:**

INVNO CUSTNAME ITEMNAME

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111 S. GHOSH TABLE

123 P. SAHA CHAIR

114 D. DEY MIRROR

115 A. ROY FRAME

121 A. PAUL TABLE