Consider the following database and display the output along with the SQL query.

Customer (c_no, c_name, c_address, c_contact)

Purchase (pur_id, c_no, p_id)

Product (p_id, p_name, price, quantity)

a. Find the names of all products having price 1000.
b. Find the name of those customers who purchased Dell Laptop.
c. Find the total number of products purchased by customer "Ram".
d. Increase price of all products by 5%.
e. Find total price of Apple Mobiles.

Creation of Tables:

SQL Query:

```
Create table customer (
        c_no INT PRIMARY KEY,
        c_name  VARCHAR(30),
        c_address VARCHAR(30),
        c_contact VARCHAR(30)
);

Create table product (
        p_id INT PRIMARY KEY,
        p_name VARCHAR(30),
        price INT,
        quantity INT
);

Create table purchase(
        pur_id INT PRIMARY KEY,
```

```
    c_no INT,
    p_id INT,
    FOREIGN KEY (c_no) REFERENCES customer (c_no)
    FOREIGN KEY (p_id) REFERENCES product (p_id)
);
```

Insertion of Data:

SQL Query:

```
Insert into customer (c_no, c_name, c_address, c_contact)
Values
    (7901, “Ram”, “Kathmandu”, “9812345678”),
    (7902, “Shyam”, “Lalitpur”, “9887654321”),
    (7903, “Hari”, “Bhaktapur”, “9878123456”);

Insert into product (p_id, p_name, price, quantity)
Values
    (9001, “Dell Laptop”, 80000, 10),
    (9002, “Apple Mobile”, 150000, 5),
    (9003, “Samsung Mobile”, 100000, 3),
    (9004, “Earphone”, 1000,  8);

Insert into purchase (pur_id, c_no, p_id)
Values
    (2001, 7901, 9001),
    (2002, 7901, 9002),
    (2003, 7902, 9004);
    (2004, 7903, 9003);
```

Table after Insertion of Data:

```
mysql> select * from product;
+------+---------------+--------+----------+
| p_id | p_name        | price  | quantity |
+------+---------------+--------+----------+
| 9001 | Dell Laptop   |  80000 |       10 |
| 9002 | Apple Mobile  | 150000 |        5 |
| 9003 | Samsung Mobile| 100000 |        3 |
| 9004 | Earphone      |   1000 |        8 |
+------+---------------+--------+----------+
4 rows in set (0.03 sec)
```

Product Table

```
mysql> select * from purchase;
+--------+------+------+
| pur_id | c_no | p_id |
+--------+------+------+
|   2001 | 7901 | 9001 |
|   2002 | 7901 | 9002 |
|   2003 | 7902 | 9004 |
|   2004 | 7903 | 9003 |
+--------+------+------+
4 rows in set (0.03 sec)
```

Purchase Table

```
mysql> select * from customer;
+------+--------+----------+------------+
| c_no | c_name | c_address | c_contact  |
+------+--------+----------+------------+
| 7901 | Ram    | Kathmandu | 9812345678 |
| 7902 | Shyam  | Lalitpur  | 9887654321 |
| 7903 | Hari   | Bhaktapur | 9878123456 |
+------+--------+----------+------------+
3 rows in set (0.03 sec)
```

Costumer Table

a. Find the names of all products having price 1000.

SQL Query:

Select p_name from product where price = 1000;

Table:

Here, the table shows the product's names (p_name) that are priced exactly at 1000.

```
mysql> select p_name from product where price = 1000;
+----------+
| p_name   |
+----------+
| Earphone |
+----------+
1 row in set (0.00 sec)
```

b. Find the name of those customers who purchased Dell Laptop.

SQL Query:

```
Select distinct c_name
From customer as c
Join purchase as pur on c.c_no = pur.c_no
Join product as p on pur.p_id = p.p_id
Where  p_name = "Dell Laptop";
```

Table:

Here, the table shows the customers (c_name) who have purchased a “Dell Laptop”, ensuring each customer appears only once.

```
mysql> select distinct c_name
    -> from customer as c
    -> join purchase as pur on c.c_no = pur.c_no
    -> join product as p on pur.p_id = p.p_id
    -> where p_name = "Dell Laptop";
+--------+
| c_name |
+--------+
| Ram    |
+--------+
1 row in set (0.00 sec)
```

c. Find the total number of products purchased by customer “Ram”.

SQL Query:

```
Select c.c_name, count(*) as Total_Products_Purchased
From customer as c
Join purchase as pur on c.c_no = pur.c_no
Join  product as p on pur.p_id = p.p_id
Where c_name = "Ram";
```

Table:

Here, the table shows the number of products “Ram” purchased in total.

Here, count (*) is used to count the number of rows in a table.

```
mysql> select c.c_name, count(*) as Total_Products_Purchased
    -> from customer as c
    -> join purchase as pur on c.c_no = pur.c_no
    -> join product as p on pur.p_id = p.p_id
    -> where c_name = "Ram";
+--------+--------------------------+
| c_name | Total_Products_Purchased |
+--------+--------------------------+
| Ram    |                        2 |
+--------+--------------------------+
1 row in set (0.00 sec)
```

d. Increase price of all products by 5%.

SQL Query:

Update product

Set price = price * 1.05;

Table:

Here, the table shows the increased price of all products by 5%.

```
mysql> update product
    -> set price = price * 1.05;
Query OK, 4 rows affected (0.03 sec)
Rows matched: 4  Changed: 4  Warnings: 0

mysql> select *  from product;
+------+---------------+--------+----------+
| p_id | p_name        | price  | quantity |
+------+---------------+--------+----------+
| 9001 | Dell Laptop   |  84000 |       10 |
| 9002 | Apple Mobile  | 157500 |        5 |
| 9003 | Samsung Mobile| 105000 |        3 |
| 9004 | Earphone      |   1050 |        8 |
+------+---------------+--------+----------+
4 rows in set (0.00 sec)
```

e. Find total price of Apple Mobiles.

SQL Query:

Select sum(price * quantity) as Price_of_Apple_Mobiles

From Product

Where p_name = 'Apple Mobile';

Table:

Here, the table shows the total value of all Apple Mobiles based on their price and quantity.

```
mysql> select sum(price * quantity) as Price_of_Apple_Mobiles
    -> from product
    -> where p_name = "Apple Mobile";
+------------------------+
| Price_of_Apple_Mobiles |
+------------------------+
|                 787500 |
+------------------------+
1 row in set (0.00 sec)
```