

# Solution : Experiment-1

## Part-A

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```
1. > CREATE TABLE CUSTOMER
2. > (
3. > first_name varchar(15) not null unique,
4. > last_name varchar(15) not null,
5. > address varchar(35) default 'NULL',
6. > city varchar(15) default 'NULL',
7. > country varchar(15) default 'NULL',
8. > birth_date date,
9. > primary key( first_name, last_name )
10.> ) ;
```

```
1. > INSERT INTO CUSTOMER VALUES ( "John", "Smith", "Western Road", "New
   York", "USA", '1969-12-12' );
2. > INSERT INTO CUSTOMER VALUES ( "David", "Stonewall", "Park Avenue", "San
   Francisco", "USA", '1954-01-03' );
3. > INSERT INTO CUSTOMER VALUES ( "Susan", "Grant", "Lord Park", "Los
   Angeles", "USA", '1970-03-03' );
4. > INSERT INTO CUSTOMER VALUES ( "Paul", "O'Neil", "Red Cross", "New York",
   "USA", '1982-09-17' );
5. > INSERT INTO CUSTOMER VALUES ( "Stephen", "Grant", "Carpet Road", "Los
   Angeles", "USA", '1974-03-03' );
```

```
1. > ALTER TABLE CUSTOMER ADD ( gender varchar(1) ) ;
```

```
1. > ALTER TABLE CUSTOMER ADD ( telephone varchar(11) COMMENT 'Tel. phone
   numbers may contain special characters' ) ;
```

```
2. > ALTER TABLE CUSTOMER MODIFY address varchar(80) ;
```

```
3. <desc CUSTOMER>
```

```
4. +-----+-----+-----+-----+-----+-----+
5. | Field      | Type      | Null | Key | Default | Extra |
6. +-----+-----+-----+-----+-----+-----+
7. | first_name | varchar(15) | NO   | PRI | NULL    |       |
8. | last_name  | varchar(15) | NO   | PRI | NULL    |       |
9. | address    | varchar(80) | YES  |     | NULL    |       |
10. | city       | varchar(15) | YES  |     | NULL    |       |
11. | country    | varchar(15) | YES  |     | NULL    |       |
12. | birth_date | date       | YES  |     | NULL    |       |
13. | gender     | varchar(1)  | YES  |     | NULL    |       |
14. | email      | varchar(35) | NO   |     | NULL    |       |
15. | telephone  | varchar(11) | YES  |     | NULL    |       |
```

## Part-B

```
1. > CREATE TABLE STUDENT ( roll_no varchar(10) not null unique primary key,
    sname varchar(30) not null, maths numeric(4) not null, chem numeric(4) not
    null, phy numeric(4) not null );
```

```
1. > INSERT INTO STUDENT VALUES ( 'CSE022', 'Raj Malhotra', 70, 80, 90 ) ;
2. > INSERT INTO STUDENT VALUES ( 'CSE012', 'Gopal Tyagi', 97, 62, 82 ) ;
3. > INSERT INTO STUDENT VALUES ( 'CSE015', 'Gopal Tyagi', 97, 62, 82 ) ;
4. > INSERT INTO STUDENT VALUES ( 'CSE018', 'Ganesh Trivedi', 86, 82, 72 ) ;
5. > INSERT INTO STUDENT VALUES ( 'CSE028', 'Shivraj Ojha', 76, 87, 91 ) ;
```

```
1. > ALTER TABLE STUDENT ADD ( total numeric(5) not null ) ;
```

```
2. > UPDATE STUDENT SET total = maths + phy + chem ;
```

```
3. <desc STUDENT>
```

```
4. +-----+-----+-----+-----+-----+-----+
5. | Field   | Type           | Null | Key | Default | Extra |
6. +-----+-----+-----+-----+-----+-----+
7. | roll_no | varchar(10)    | NO   | PRI | NULL    |       |
8. | sname   | varchar(30)    | NO   |     | NULL    |       |
9. | maths   | decimal(4,0)   | NO   |     | NULL    |       |
10. | chem    | decimal(4,0)   | NO   |     | NULL    |       |
11. | phy     | decimal(4,0)   | NO   |     | NULL    |       |
12. | total   | decimal(5,0)   | NO   |     | NULL    |       |
13. +-----+-----+-----+-----+-----+-----+
```

```
14. > ALTER TABLE STUDENT ADD ( average numeric(5,2) not null ) ;
```

```
15. <desc STUDENT>
```

```
16. +-----+-----+-----+-----+-----+-----+
17. | Field   | Type           | Null | Key | Default | Extra |
18. +-----+-----+-----+-----+-----+-----+
19. | roll_no | varchar(10)    | NO   | PRI | NULL    |       |
20. | sname   | varchar(30)    | NO   |     | NULL    |       |
21. | maths   | decimal(4,0)   | NO   |     | NULL    |       |
22. | chem    | decimal(4,0)   | NO   |     | NULL    |       |
23. | phy     | decimal(4,0)   | NO   |     | NULL    |       |
24. | total   | decimal(5,0)   | NO   |     | NULL    |       |
25. | average | decimal(5,2)   | NO   |     | NULL    |       |
26. +-----+-----+-----+-----+-----+-----+
```

```
1. > UPDATE STUDENT SET average = total/3 ;
```