

```

mysql> create database BidvestBank;
Query OK, 1 row affected (0.28 sec)

mysql> use BidvestBank;
Database changed
mysql>
mysql> create table BankBranch
-> (
-> branch_name varchar(25),
-> branch_city varchar(30),
-> assets varchar(15)
-> );
Query OK, 0 rows affected (1.89 sec)

mysql>
mysql> create table Customer
-> (
-> customer_name varchar(15),
-> customer_street varchar(30),
-> customer_city varchar(30)
-> );
Query OK, 0 rows affected (0.42 sec)

mysql>
mysql> create table CustomerAccount
-> (
-> account_number char(15),
-> branch_name varchar(25),
-> balance double
-> );
Query OK, 0 rows affected (0.41 sec)

mysql>
mysql>
mysql> create table Loan
-> (
-> loan_number char(5),
-> branch_name varchar(25),
-> amount double
-> );
Query OK, 0 rows affected (0.28 sec)

mysql>
mysql> create table Depositor
-> (
-> customer_name varchar(15),
-> account_number char(15)
-> );
Query OK, 0 rows affected (0.62 sec)

mysql>
mysql> create table Borrower
-> (
-> customer_name varchar(15),
-> loan_number char (5)
-> );
Query OK, 0 rows affected (0.89 sec)

mysql>
mysql> create table Employee
-> (
-> employee_name varchar(15),
-> branch_name varchar(25),
-> salary double
-> );
Query OK, 0 rows affected (0.85 sec)

```

QUESTION 3



```

mysql> INSERT INTO Customer
-> VALUES
-> ('Modise', 'Spring', 'George'),
-> ('Brooks', 'Senator', 'Johannesburg'),
-> ('Jooste', 'North', 'Kimberly'),
-> ('Lombard', 'Sand Hill', 'Nelspruit'),
-> ('Mokwena', 'Walnut', 'Port-Elizabeth'),
-> ('Johnson', 'Mmabatho', 'Mafikeng'),
-> ('Johnson', 'Alma', 'Bloemfontein'),
-> ('Zwane', 'Main', 'Mafikeng'),
-> ('Linday', 'Park', 'George'),
-> ('Smith', 'North', 'Kimberly'),
-> ('Dlamini', 'Putnam', 'Port-Elizabeth'),
-> ('Williams', 'Nassau', 'Giyane');
Query OK, 12 rows affected (0.05 sec)
Records: 12 Duplicates: 0 Warnings: 0

mysql>
mysql> INSERT INTO Depositor
-> VALUES
-> ('Johnson', 'A-5624'),
-> ('Johnson', 'A-5624'),
-> ('Johnson', 'A-7794'),
-> ('Zwane', 'A-3546'),
-> ('Lindsay', 'A-3453'),
-> ('Smith', 'A-4467'),
-> ('Dlamini', 'A-2542');
Query OK, 7 rows affected (0.07 sec)
Records: 7 Duplicates: 0 Warnings: 0

mysql>
mysql> INSERT INTO Loan
-> VALUES
-> ('L-11', 'Mamelodi', 900),
-> ('L-14', 'Newtown', 1500),
-> ('L-15', 'Sunnyside', 1500),
-> ('L-16', 'Sunnyside', 1300),
-> ('L-17', 'Newtown', 1000),
-> ('L-23', 'Universitas', 2000),
-> ('L-93', 'Mabopane', 500);
Query OK, 7 rows affected (0.06 sec)
Records: 7 Duplicates: 0 Warnings: 0

mysql>
mysql> INSERT INTO CustomerAccount
-> VALUES
-> ('A-5324', 'Newtown', 500),
-> ('A-5624', 'Sunnyside', 400),
-> ('A-7794', 'Midrand', 900),
-> ('A-4467', 'Mabopane', 700),
-> ('A-3546', 'Midrand', 750),
-> ('A-3453', 'Universitas', 700),
-> ('A-2542', 'Mamelodi', 350);
Query OK, 7 rows affected (0.17 sec)
Records: 7 Duplicates: 0 Warnings: 0

mysql>
mysql> INSERT INTO BankBranch
-> VALUES
-> ('Midrand', 'Johannesburg', 7100000),
-> ('Newtown', 'Johannesburg', 9000000),
-> ('Mabopane', 'Pretoria', 4000000),
-> ('Belgravia', 'Kimberly', 3700000),
-> ('Sunnyside', 'Pretoria', 1700000),
-> ('Amanzimtoti', 'Durban', 3000000),
-> ('Universitas', 'Bloemfontein', 2100000),
-> ('Mamelodi', 'Pretoria', 8000000);
Query OK, 8 rows affected (0.06 sec)
Records: 8 Duplicates: 0 Warnings: 0

mysql>

```

```
mysql>
mysql> INSERT INTO Loan
-> VALUES
-> ('L-11', 'Mamelodi', 900),
-> ('L-14', 'Newtown', 1500),
-> ('L-15', 'Sunnyside', 1500),
-> ('L-16', 'Sunnyside', 1300),
-> ('L-17', 'Newtown', 1000),
-> ('L-23', 'Universitas', 2000),
-> ('L-93', 'Mabopane', 500);
Query OK, 7 rows affected (0.06 sec)
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql>
mysql> INSERT INTO Borrower
-> VALUES
-> ('Modise', 'L-16'),
-> ('Jooste', 'L-93'),
-> ('Johnson', 'L-15'),
-> ('Jackson', 'L-14'),
-> ('Zwane', 'L-17'),
-> ('Smith', 'L-11'),
-> ('Smith', 'L-23'),
-> ('Williams', 'L-17');
Query OK, 8 rows affected (0.07 sec)
Records: 8 Duplicates: 0 Warnings: 0
```

```
mysql>
mysql> INSERT INTO Employee
-> VALUES
-> ('Modise', 'Sunnyside', 1500),
-> ('Brown', 'Sunnyside', 1300),
-> ('Gopal', 'Sunnyside', 5300),
-> ('Johnson', 'Newtown', 1500),
-> ('Loreena', 'Newtown', 1300),
-> ('Peterson', 'Newtown', 2500),
-> ('Rao', 'Austin', 1500),
-> ('Sato', 'Austin', 1600);
Query OK, 8 rows affected (0.14 sec)
Records: 8 Duplicates: 0 Warnings: 0
```

QUESTION 4 & 5

```
mysql>
mysql> SELECT * FROM CustomerAccount WHERE balance < 700;
+-----+-----+-----+
| account_number | branch_name | balance |
+-----+-----+-----+
| A-5324         | Newtown    | 500     |
| A-5624         | Sunnyside  | 400     |
| A-2542         | Mamelodi   | 350     |
+-----+-----+-----+
3 rows in set (0.04 sec)

mysql> SELECT customer_name FROM Customer WHERE customer_city = 'Johannesburg';
+-----+
| customer_name |
+-----+
| Brooks        |
+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM Employee WHERE salary > 1500 && branch_name != 'Newtown';
+-----+-----+-----+
| employee_name | branch_name | salary |
+-----+-----+-----+
| Gopal         | Sunnyside  | 5300   |
| Sato          | Austin     | 1600   |
+-----+-----+-----+
2 rows in set, 1 warning (0.00 sec)

mysql> SELECT AVG(salary), COUNT(*) FROM Employee;
+-----+-----+
| AVG(salary) | COUNT(*) |
+-----+-----+
| 2062.5     | 8        |
+-----+-----+
1 row in set (0.03 sec)

mysql> SELECT branch_name FROM BankBranch WHERE assets = ( SELECT MAX(assets) FROM BankBranch);
+-----+
| branch_name |
+-----+
| Newtown     |
+-----+
1 row in set (0.01 sec)
```

```
mysql>
mysql> SELECT employee_name FROM Employee WHERE branch_name = 'Sunnyside';
+-----+
| employee_name |
+-----+
| Modise        |
| Brown         |
| Gopal         |
+-----+
3 rows in set (0.00 sec)

mysql> SELECT * FROM Borrower;
+-----+-----+
| customer_name | loan_number |
+-----+-----+
| Modise        | L-16        |
| Jooste        | L-93        |
| Johnson       | L-15        |
| Jackson       | L-14        |
| Zwane         | L-17        |
| Smith         | L-11        |
| Smith         | L-23        |
| Williams      | L-17        |
+-----+-----+
8 rows in set (0.00 sec)

mysql> SELECT account_number FROM CustomerAccount WHERE balance > 900;
Empty set (0.00 sec)

mysql> SELECT account_number, balance FROM CustomerAccount WHERE branch_name = 'Newtown' && balance > 600;
Empty set, 1 warning (0.00 sec)
```

```
mysql> SELECT branch_name, assets FROM BankBranch;
+-----+-----+
| branch_name | assets |
+-----+-----+
| Midrand     | 7100000 |
| Newtown     | 9000000 |
| Mabopane    | 4000000 |
| Belgravia   | 3700000 |
| Sunnyside   | 1700000 |
| Amanzimtoti | 3000000 |
| Universitas | 2100000 |
| Mamelodi    | 8000000 |
+-----+-----+
8 rows in set (0.00 sec)
```