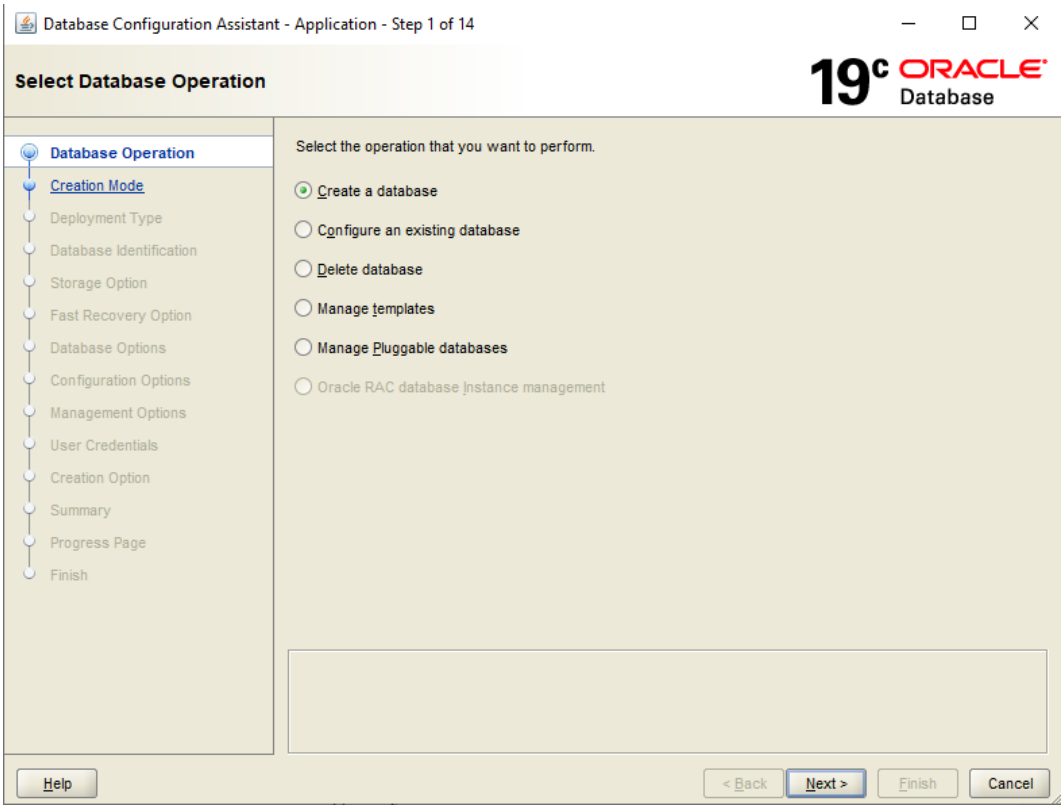
LAB 1

1. Create a Database using DBCA.

Steps Involved:

- **Open cmd, type *dbca* then a screen will be opened.**
- **Follow the instructions in the screen as:**



2. Create table customers with attributes first_name, last_name, phone_number and customer_id as a primary key.

Query:

```
create table customers (
   customer_id int not null PRIMARY Key,
   first_name varchar(25) not null,
   last_name varchar(25) not null,
   phone_number int not null
);
```

3. Create table orders with attributes items, price, order_id as primary key and customer_id as a foreign key.

Query:

```
create table orders (
   order_id int not null PRIMARY Key,
   items varchar(25) not null,
   price NUMBER(8,2) not null,
   customer_id INT not NULL,
   FOREIGN KEY (customer_id) REFERENCES customers(customer_id)
);
```

4. Insert 5 rows in customer table and 5 rows in order table.

Query:

To insert data in customers table

```
insert into customers (customer_id, first_name, last_name, phone_number) values (1, 'Bijay', 'Shrestha', 9876543210);
insert into customers (customer_id, first_name, last_name, phone_number) values (2, 'Dipak', 'Thapa Magar', 9860558458);
insert into customers (customer_id, first_name, last_name, phone_number) values (3, 'Ramesh', 'Neupane', 9873333210);
insert into customers (customer_id, first_name, last_name, phone_number) values (4, 'Gaurav', 'Poudel', 9876549990);
insert into customers (customer_id, first_name, last_name, phone_number) values (5, 'Sailesh', 'Karki', 9876541470);
```

To insert data in orders table

```
insert into orders (order_id, items, price, customer_id) values (1, 'Apple', 120, 2);
insert into orders (order_id, items, price, customer_id) values (2, 'Banana', 220, 1);
insert into orders (order_id, items, price, customer_id) values (3, 'Cream', 124, 3);
insert into orders (order_id, items, price, customer_id) values (4, 'Biscute', 20, 5);
insert into orders (order_id, items, price, customer_id) values (5, 'Keyboard', 420, 4);
```

To view customers table

```
select * from customers;
```

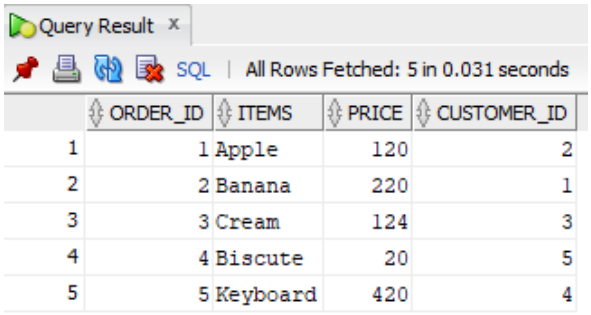
Query Result

SQL | All Rows Fetched: 5 in 0.011 seconds

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	PHONE_NUMBER
1	1	Bijay	Shrestha	9876543210
2	2	Dipak	Thapa Magar	9860558458
3	3	Ramesh	Neupane	9873333210
4	4	Gaurav	Poudel	9876549990
5	5	Sailesh	Karki	9876541470

To view orders table

select * from orders;



Query Result

SQL | All Rows Fetched: 5 in 0.031 seconds

	ORDER_ID	ITEMS	PRICE	CUSTOMER_ID
1	1	Apple	120	2
2	2	Banana	220	1
3	3	Cream	124	3
4	4	Biscute	20	5
5	5	Keyboard	420	4

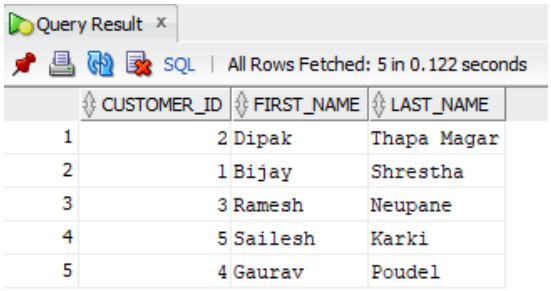
5. Create View to display the list of customers who have placed orders

Query:

```
CREATE VIEW customer_list AS
SELECT c.customer_id,c.first_name, c.last_name
FROM customers c
INNER JOIN orders o
ON c.customer_id = o.customer_id;
```

To view customer list table

select * from customer_list;



Query Result

SQL | All Rows Fetched: 5 in 0.122 seconds

	CUSTOMER_ID	FIRST_NAME	LAST_NAME
1	2	Dipak	Thapa Magar
2	1	Bijay	Shrestha
3	3	Ramesh	Neupane
4	5	Sailesh	Karki
5	4	Gaurav	Poudel

Conclusion and Discussion:

Hence, we created a database using DBCA and created various tables, inserted data in tables, became familiarized with primary key and foreign key concepts and were able to create views with inner join.