UNION AND UNION ALL

Tables:

“Customer”

CustomerID	CustomerName	CustomerContact	City	Country
1	Fahad	3315598741	Lahore	Pakistan
2	Shoaib	3315598841	London	England
3	Zai	3315598751	Lahore	Pakistan
4	Ahmad	3315598742	Doha	Qatar
5	Faraz	3361149980	Kabul	Afghanistan
6	Zahid	3361141180	Dukhan	Qatar

“Supplier”

SupplierID	SupplierName	SupplierContact	City	Country
0	Furqan	3339299302	Kabul	Afghanistan
1	Manzar	3319284302	Lahore	Pakistan
2	Furqan	3339299302	Jalaabad	Afghanistan
3	Waseem	3139299109	Wuhan	China
4	Sharjeel	3449299665	Beijing	China
5	Zakir	3329211305	Quetta	Pakistan

UNION:

The UNION operator is used to combine the result-set of two or more SELECT statements.

Conditions:

- Each SELECT statement within UNION must have the same number of columns
- The columns must also have similar data types
- The columns in each SELECT statement must also be in the same order

Syntax:

SELECT *column_name(s)* FROM *table1*
UNION
SELECT *column_name(s)* FROM *table2*;

For Example:

If we apply UNION on both tables (customer and supplier) we will get the results. If we select city and country from both the tables then we will get the results without the repetition of data. Which means that there will be no repetition in cities.

```
SELECT City, Country FROM customer
UNION
SELECT City, Country FROM supplier
```

Results:

City	Country
Lahore	Pakistan
London	England
Doha	Qatar
Kabul	Afghanistan
Dukhan	Qatar
Jalaabad	Afghanistan
Wuhan	China
Beijing	China
Quetta	Pakistan

UNION ALL:

Unlike UNION, Union All shows all the results. Which means that if there is repetition in data, Union All will show all the data along with repetition.

Syntax:

SELECT *column_name(s)* FROM *table1*
UNION ALL
SELECT *column_name(s)* FROM *table2*;

For Example:

If we apply Union All on above two tables we will get the results. In results, all data will be selected along with repetition which we have specified.

```
SELECT City, Country FROM customer
UNION All
SELECT City, Country FROM supplier
```

Results:

City	Country
Lahore	Pakistan
London	England
Lahore	Pakistan
Doha	Qatar
Kabul	Afghanistan
Dukhan	Qatar
Kabul	Afghanistan
Lahore	Pakistan
Jalaabad	Afghanistan
Wuhan	China
Beijing	China
Quetta	Pakistan

NOTE: You can use "Where" condition with both (Union and Union All) if you want a specific data. See below images for example:

Union with Where:

```
SELECT City, Country FROM customer where Country="Pakistan"
UNION
SELECT City, Country FROM supplier where Country="Pakistan"
```

City	Country
Lahore	Pakistan
Quetta	Pakistan

It returns all the cities of Pakistan but without the repetition of data.

Union All with Where:

```
SELECT City, Country FROM customer where Country="Pakistan"
UNION ALL
SELECT City, Country FROM supplier where Country="Pakistan"
```

City	Country
Lahore	Pakistan
Lahore	Pakistan
Lahore	Pakistan
Quetta	Pakistan

It returns all the cities of Pakistan with the repetition of data.

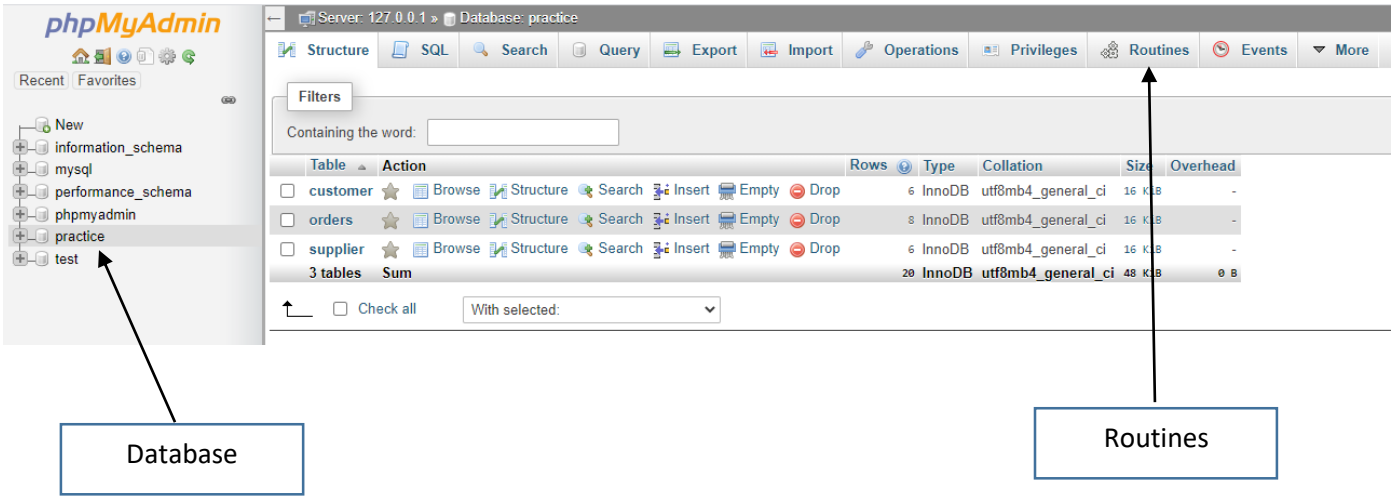
STORED PROCEDURES

A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.

So if you have an SQL query that you write over and over again, save it as a stored procedure, and then just call it to execute it.

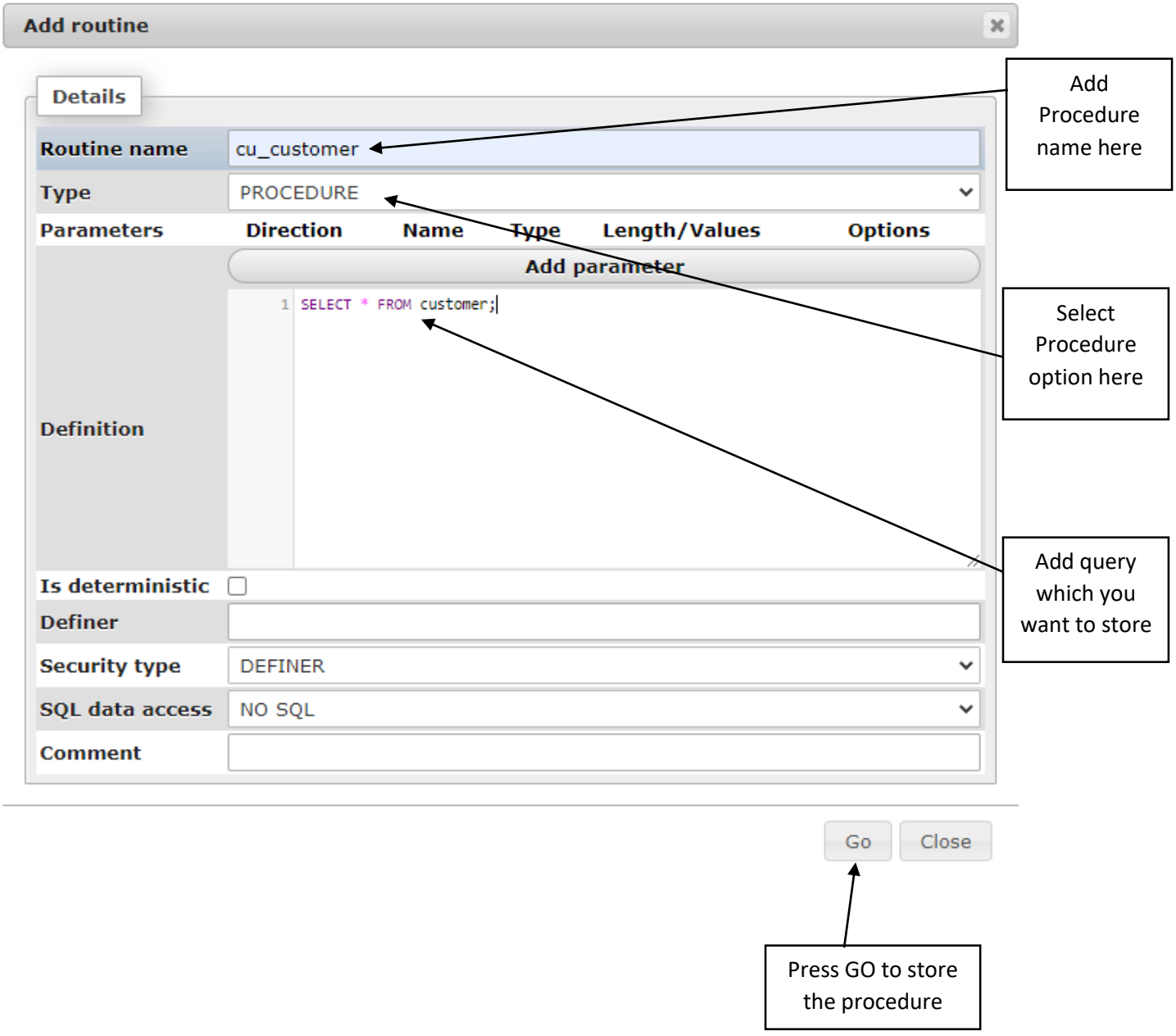
Steps of doing Stored Procedure:

Step 1: Go to the database and select “Routine” option.

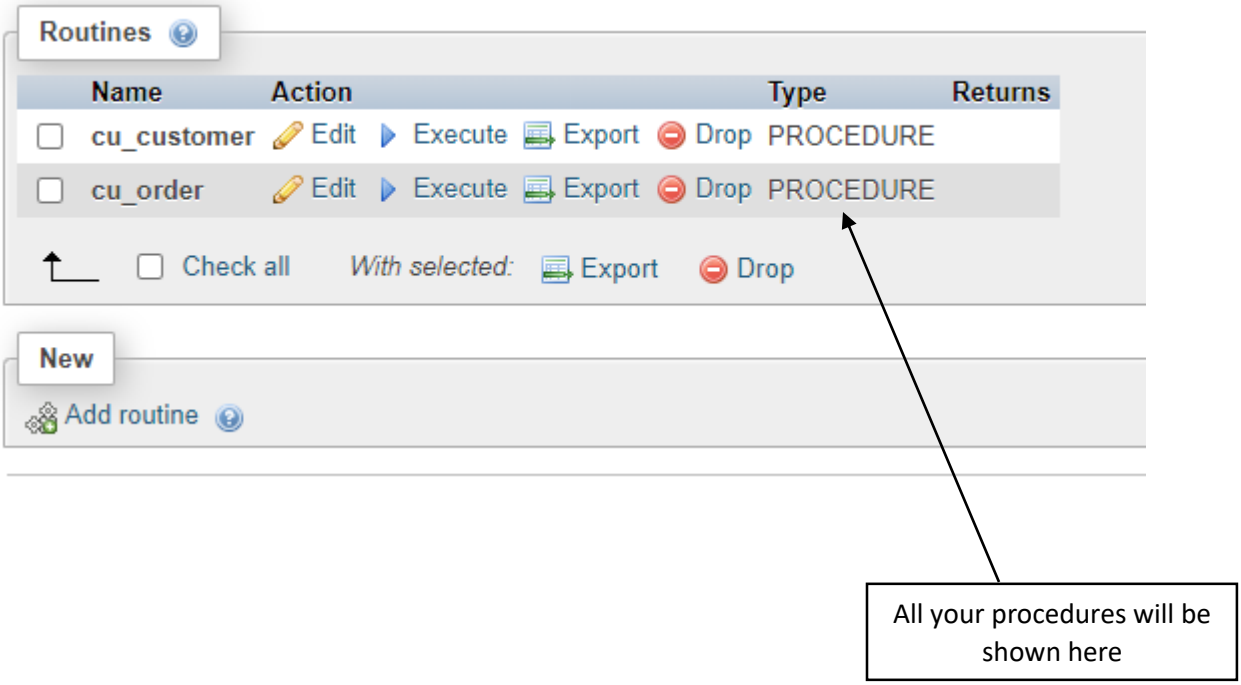


Step 2: When you click on “Routine” the following window will appear. Then select “New Routine” from the following window.

Step 3: When you click the “New Routine” the following window will appear. With the help of labels read the instructions and add a new stored procedure.



Step 4: The procedure will be stored and you can see the stored procedures here (see below image).



Parameterized Stored Procedure:

You can also pass parameters to a stored procedure, so that the stored procedure can act based on the parameter value(s) that is passed.

Parameters are used when there is a “Where” condition in SQL Query. You assign a value to a parameter which act as a where condition value for the query.

For example: In where condition,

- CustomerID=C_ID
- C_ID=4;

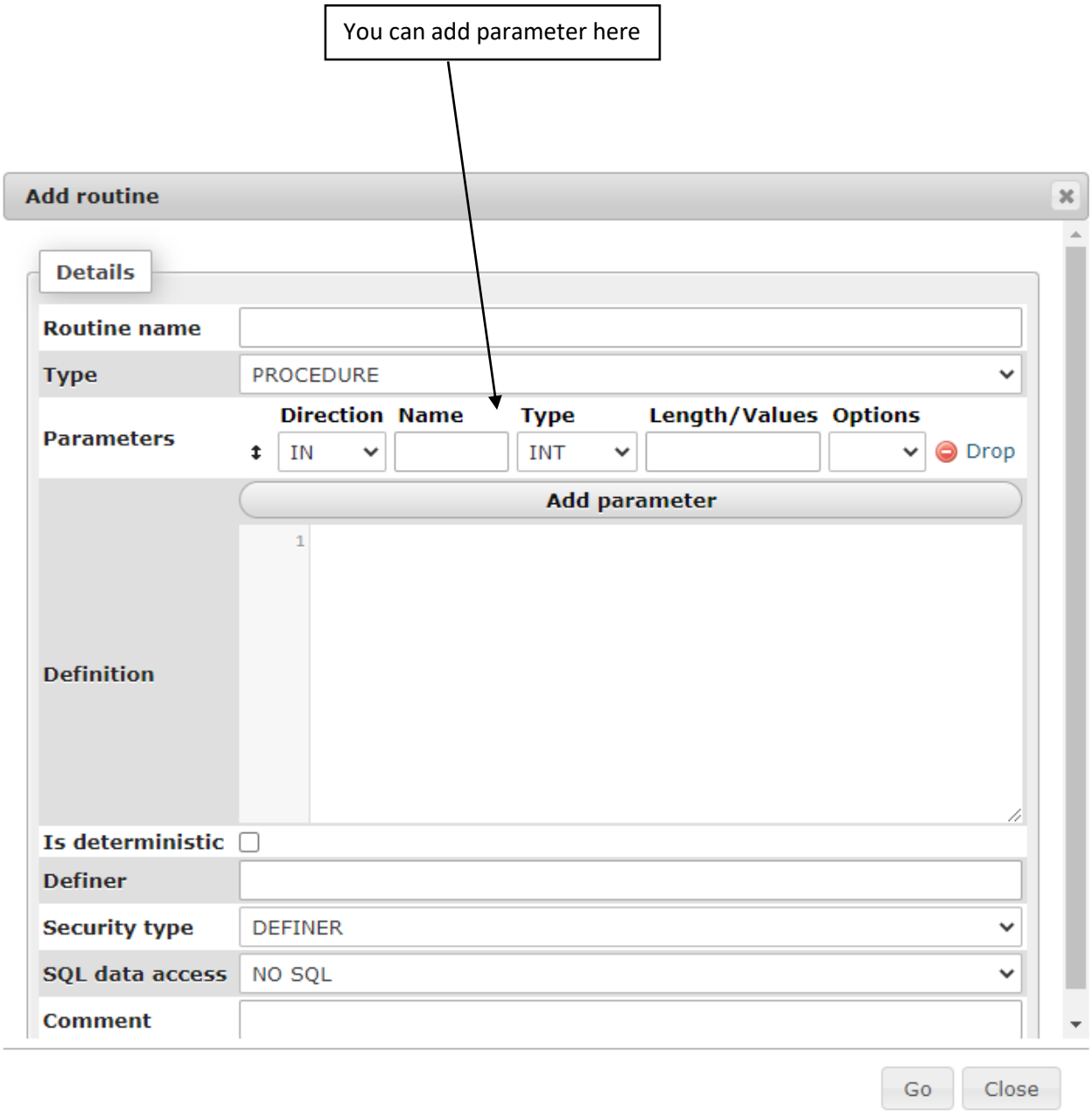
Then CustomerId will show the forth record because we have assigned 4 to the parameter.

Steps of doing Parameterized Stored Procedure:

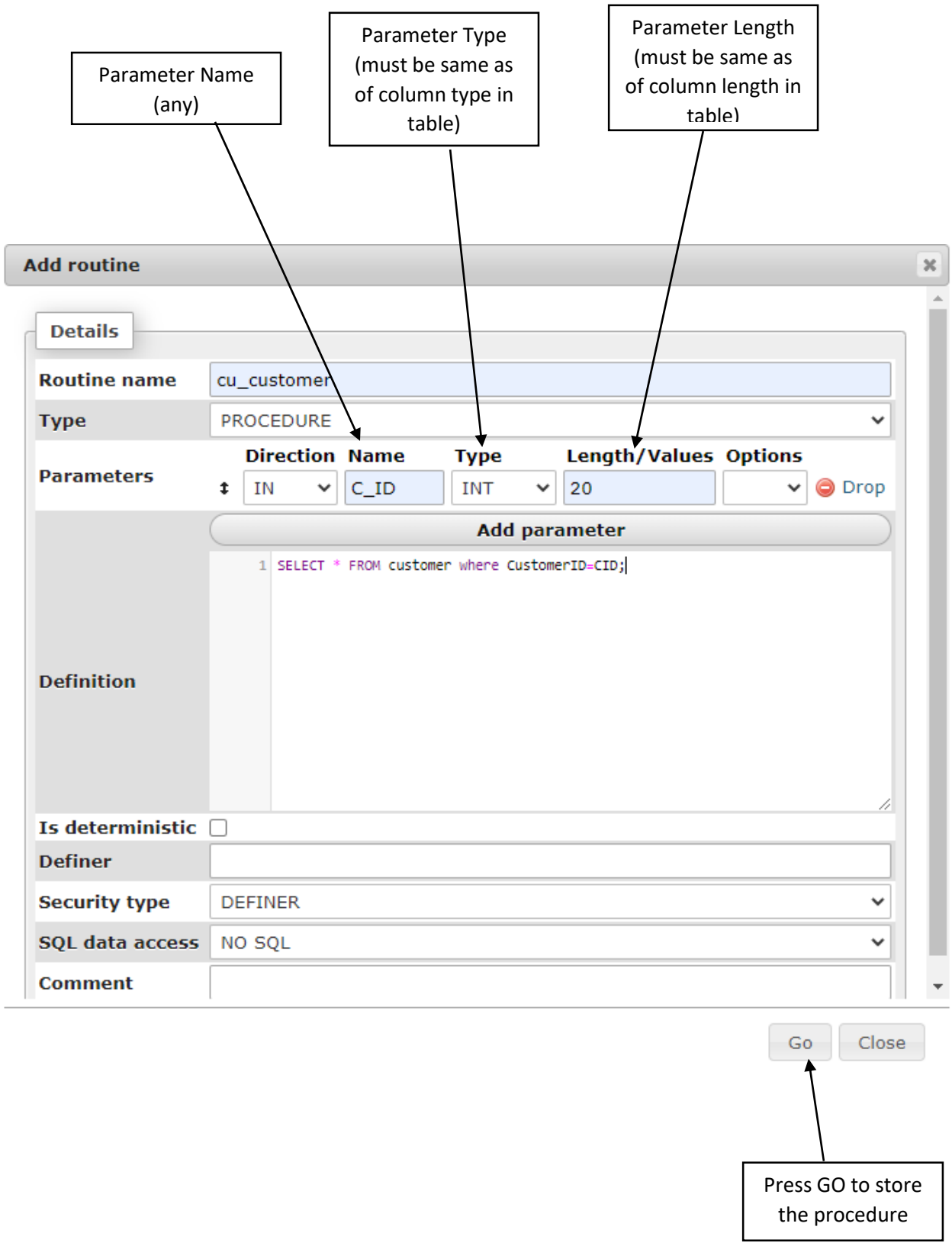
Step1: When you add a new routine, the window appears will show two types of procedures.

- Simple Stored Procedure (explained above)
- Parameterized Stored Procedure

There is an extra window for parameterized stored procedure when you open a new routine. See the image below:



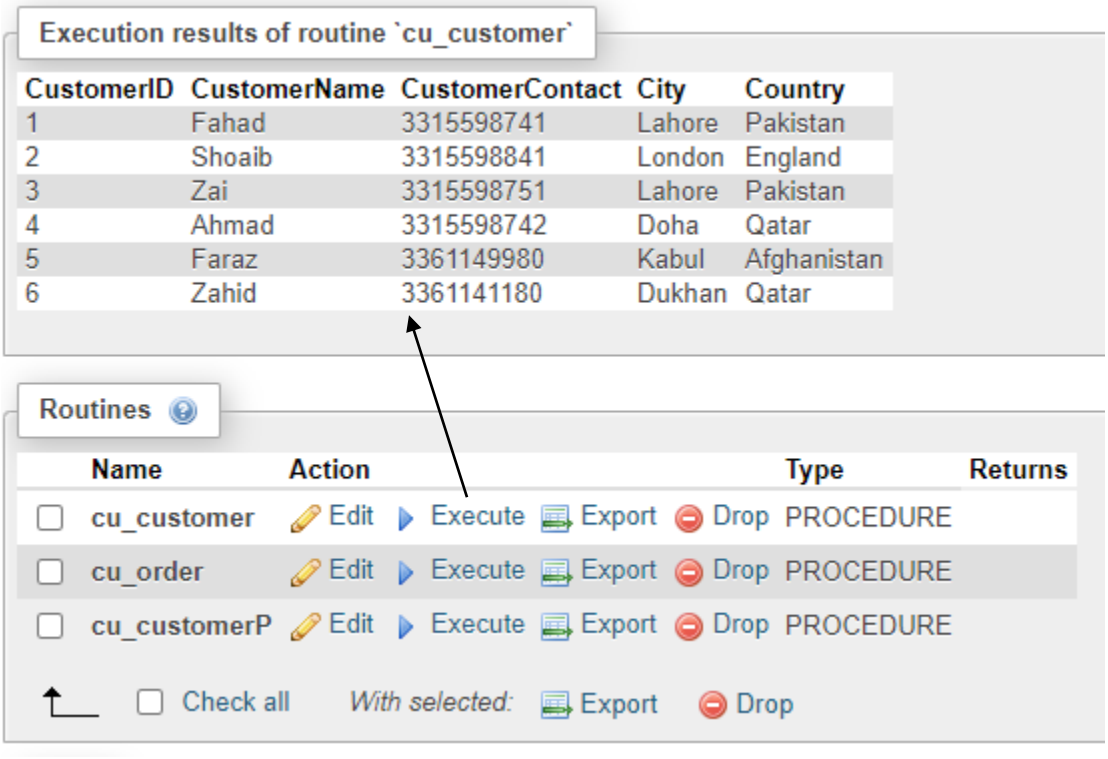
Step 2: Using the following window you can add a new parameter to a stored procedure.



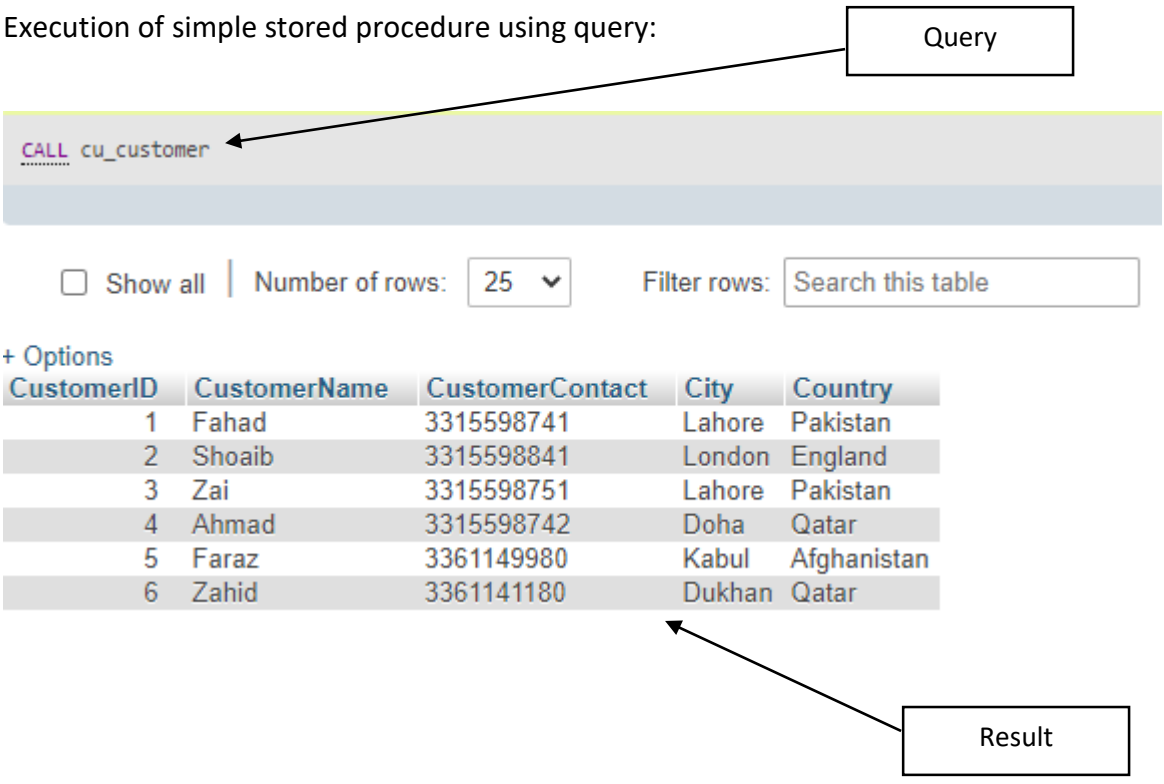
Execution of Stored Procedures:

Stored procedure can be executed either by manually or by query.

- Execution of simple stored procedure manually:

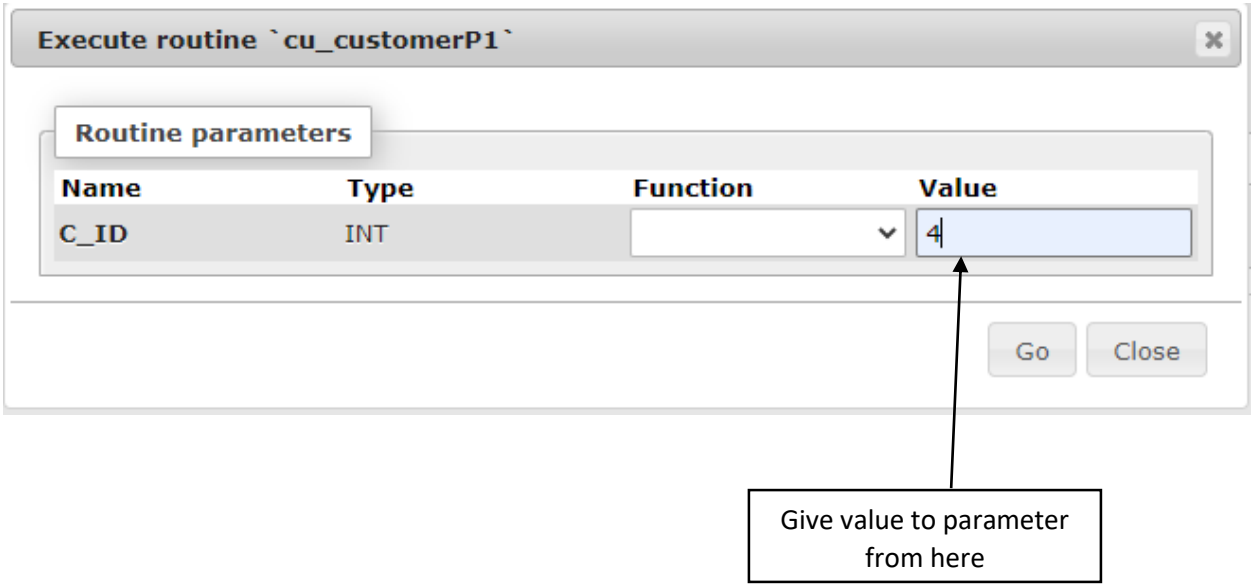


- Execution of simple stored procedure using query:

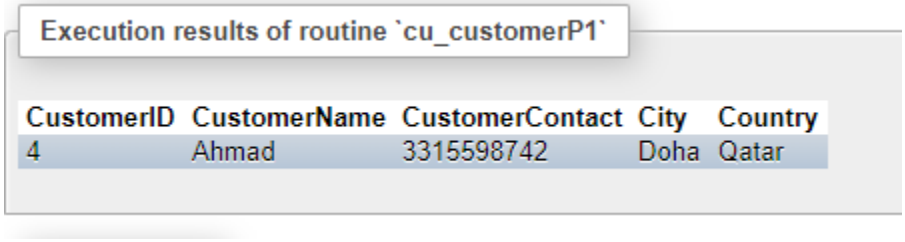


- Execution of parameterized stored procedure:

  When you click on the execute button of parameterized stored procedure the following window will be shown:

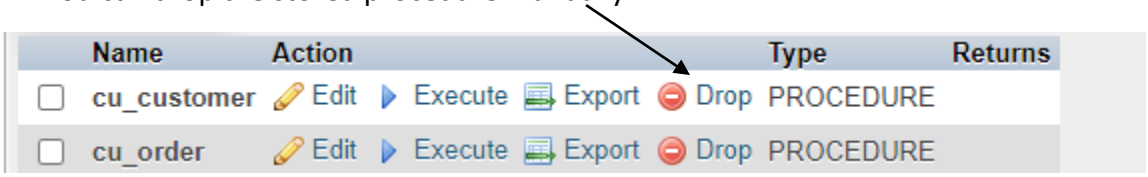


- Result:



Drop a Stored Procedure:

- You can drop the stored procedure manually:



- You can also drop the stored procedure using query:

```
Drop PROCEDURE cu_customerP1
```

THE END