

Practical 16








1. Get a list of all customers with their address starting with BE.

Here is the coding written into the SQL window within PHP my Admin.

```
SELECT * FROM customer
```

```
WHERE Address LIKE 'Be%';
```

Results of the Query within php my Admin

+ Options					CustCode	CustName	Address
							
<input type="checkbox"/>					101	J WHITE	Belfast
<input type="checkbox"/>					103	E Smyth	Belfast








2. Get a list of all customers with their address within any characters followed by f and then by any characters.

This shows the SQL Query source code in PHPMyAdmin

```
SELECT * FROM customer
```

```
WHERE Address LIKE '%f%';
```

Result from the SQL Query.

+ Options					CustCode	CustName	Address
							
<input type="checkbox"/>					101	J WHITE	Belfast
<input type="checkbox"/>					103	E Smyth	Belfast

3. Create your own scenarios that you can use Like operator and Wildcards.

Return customer information for customers whos address begins with O

SQL Sourcecode.

```
SELECT * FROM customer
```

```
WHERE Address like 'O%';
```

Result when query is run

	CustCode	CustName	Address
<input type="checkbox"/> Edit Copy Delete	102	B McCann	Omagh

Return all from Item Table where itemname is b_r_

SQL Source Code

```
SELECT * FROM item
```

```
WHERE ItemName LIKE 'B_r_';
```

Result from the query being run

	ItemCode	ItemName	UnitCost
<input type="checkbox"/> Edit Copy Delete	1	BIRO	1



Return item detail where ItemName contains APL

SQL Source Code

```
SELECT * FROM item
```

```
WHERE ItemName LIKE '%apl%';
```

Result

				ItemCode	ItemName	UnitCost
<input type="checkbox"/>		Edit		Copy		Delete
				4	STAPLER	5










4. Get All items information for item pad, diary or pencil

SQL Source Code

```
SELECT * FROM item
```

```
WHERE ItemName IN('pad', 'diary', 'pencil');
```

Results of the SQL Query

				ItemCode	ItemName	UnitCost
<input type="checkbox"/>		Edit		Copy		Delete
				2	PAD	1.50
<input type="checkbox"/>		Edit		Copy		Delete
				3	DIARY	4.50
<input type="checkbox"/>		Edit		Copy		Delete
				5	pencil	0.70

5. Get order number of item quantity between 2 and 10

SQL Source Code:

```
SELECT ONumber from orderline
```

```
WHERE Quantity between 2 and 10;
```

Result:

+ Options
ONumber
523
525
527
527

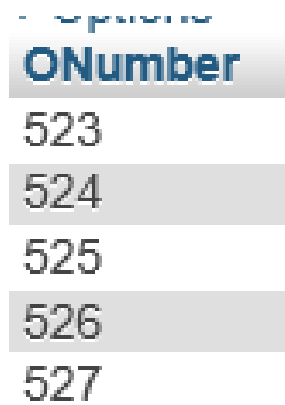
6. Get Order number of item quantity not between 2 and 10

SQL SOURCE CODE:

```
SELECT ONumber from orderline
```

```
WHERE Quantity not between 2 and 10;
```

Results



ONumber
523
524
525
526
527

7. Get all items information if the items have been ordered

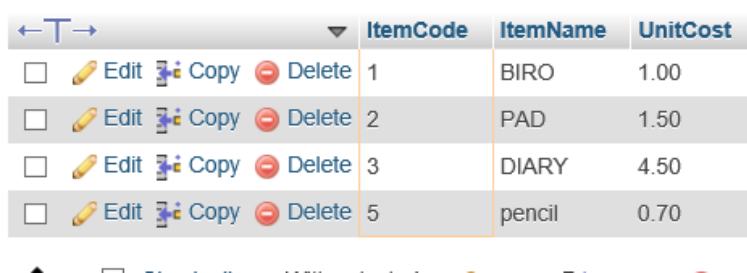
SQL Source Code:

```
SELECT * FROM item
```

```
where item.ItemCode in
```

```
(SELECT orderline.ItemCode from orderline);
```

Results



	ItemCode	ItemName	UnitCost
<input type="checkbox"/> Edit Copy Delete	1	BIRO	1.00
<input type="checkbox"/> Edit Copy Delete	2	PAD	1.50
<input type="checkbox"/> Edit Copy Delete	3	DIARY	4.50
<input type="checkbox"/> Edit Copy Delete	5	pencil	0.70

8. Get all item's information if the items have not been ordered


SQL Source Code

```
SELECT * FROM item
```

```
WHERE item.ItemCode not IN
```

```
(SELECT orderline.itemcode from orderline);
```

Result

← T →				ItemCode	ItemName	UnitCost
<input type="checkbox"/>	 Edit	 Copy	 Delete	4	STAPLER	5.00

9. Try the examples from page 11 to 22










Page 11

Source Code

```
SELECT * FROM item
```

```
WHERE unitcost not between 1 and 3;
```

Result

← T →				ItemCode	ItemName	UnitCost
<input type="checkbox"/>	 Edit	 Copy	 Delete	3	DIARY	4.50
<input type="checkbox"/>	 Edit	 Copy	 Delete	4	STAPLER	5.00
<input type="checkbox"/>	 Edit	 Copy	 Delete	5	pencil	0.70

Page 12

Source Code

```
SELECT * FROM item WHERE
```

```
(unitcost between 1 and 3)
```

```
and (itemcode not in(1,2));
```

Results

ItemCode	ItemName	UnitCost
----------	----------	----------

Page 13

Source Code

```
SELECT * FROM item
```

```
where item.ItemCode in
```

```
(select orderline.itemcode from orderline);
```

Result

	ItemCode	ItemName	UnitCost
<input type="checkbox"/> Edit Copy Delete	1	BIRO	1.00
<input type="checkbox"/> Edit Copy Delete	2	PAD	1.50
<input type="checkbox"/> Edit Copy Delete	3	DIARY	4.50
<input type="checkbox"/> Edit Copy Delete	5	pencil	0.70

Page 14

Source Code

```
SELECT * from item
```

```
WHERE item.ItemCode not IN
```

```
(select orderline.ItemCode from orderline);
```

Result

	ItemCode	ItemName	UnitCost
<input type="checkbox"/> Edit Copy Delete	4	STAPLER	5.00

Page 15

Source Code

```
SELECT c.custcode FROM customer c WHERE EXISTS (  
    SELECT orders.CustCode FROM item, orders, orderline  
    WHERE item.ItemName LIKE '%pen%' AND item.ItemCode = orderline.ItemCode AND  
    orders.ONumber = orderline.ONumber);
```

Result:

custcode
101
102
103

Page 17

Source Code:

```
SELECT ItemName FROM item  
WHERE item.UnitCost = (SELECT MAX(unitcost) FROM item);
```

Result:

ItemName
STAPLER

Page 18

Source Code

```
SELECT ONumber, MAX(q) FROM (  
    SELECT onumber, SUM(quantity) AS q FROM orderline GROUP BY ONumber  
    )sum_view;
```

Result

ONumber	MAX(q)
523	55

Page 21

Source Code

```
SELECT Orders.ONumber, customer.CustName, orders.ODate
FROM orders
INNER JOIN customer ON
orders.CustCode=customer.CustCode;
```

Result

ONumber	CustName	ODate
001	James	2018-11-29
002	Mina	2018-11-28
523	J WHITE	2015-05-12
524	B McCann	2015-05-12
525	E Smyth	2015-05-15
526	J WHITE	2015-05-17
527	B McCann	2015-05-17

Page 22

Source Code

```
SELECT c.CustCode, c.CustName, o.ONumber
FROM customer c INNER JOIN orders ON
c.CustCode = o.CustCode;
```

Result

+ Options

CustCode	CustName	ONumber
101	J WHITE	523
101	J WHITE	526
102	B McCann	524
102	B McCann	527
103	E Smyth	525
C1	James	001
C2	Mina	002

10. Get order number and their price (Quantity * UnitCost)

Source Code

```
SELECT orderline.ONumber, SUM(item.UnitCost*orderline.Quantity)
FROM orderline
INNER JOIN item ON item.ItemCode = orderline.ItemCode
GROUP BY ONumber
```

Result

+ Options	
ONumber	SUM(item.UnitCost*orderline.Quantity)
523	43.5
524	18
525	57.5
526	20
527	43.5

11. Get Order Number with the maximum price (Quantity * unitcost)

SQL Source Code

```
SELECT orderline.ONumber, MAX(item.UnitCost*orderline.Quantity)
FROM orderline
INNER JOIN item ON item.ItemCode = orderline.ItemCode;
```

Result

ONumber	MAX(item.UnitCost*orderline.Quantity)
523	50

12. Get customer's name whose order has maximum quantity for an item.

SQL source Code

```
SELECT DISTINCT customer.CustName, SUM(orderline.Quantity)
FROM customer
INNER JOIN orders ON orders.CustCode = customer.CustCode
INNER JOIN orderline ON
orders.ONumber = orderline.ONumber
```

```
WHERE orderline.Quantity = (  
    SELECT MAX(Quantity) FROM orderline);
```

Result

CustName	SUM(orderline.Quantity)
E Smyth	50