

CM2102 – Database Systems

Coursework 2 – SQL Queries - C1722325

1.
Query

```
SQL> r
1  Select StockNo, Description, Price
2  from Stocks
3  Where Price > 8
4* Order By Price
```

Result

| STOCKNO | DESCRIPTION | PRICE |
|---------|-----------------------|-------|
| 123 | Audio cassettes | 8.58 |
| 117 | 5.25 in. floppy disks | 11.38 |
| 116 | 3.5 in. floppy disks | 12.85 |
| 119 | FX-100 printer ribbon | 23.99 |
| 118 | Toner cartridges | 32.99 |

2.
Query

```
SQL> r
1  Select StockNo, Description, Price, Quantity, Units
2  From Stocks
3  Where Description Like '%paper%'
4  or Description Like '%pen%'
5* or Description Like '%pencil%'
```

Result

| STOCKNO | DESCRIPTION | PRICE | QUANTITY | UNITS |
|---------|-----------------------|-------|----------|--------|
| 102 | A4 headed paper | 4.11 | 17 | Ream |
| 103 | Photocopying paper | 2.98 | 30 | Ream |
| 104 | Coloured paper | 5.15 | 13 | Ream |
| 112 | Coloured pens | 3.65 | 17 | Box 24 |
| 113 | HB pencils | 1.97 | 22 | Box 24 |
| 128 | A3 cream notary paper | 7.85 | 21 | Ream |

6 rows selected.

3.

Query

```
SQL> r
1 Select StoreCode, Round(Avg(Price), 2) "Average Price"
2 From Stocks
3* Group By StoreCode
```

Result

```
STOREC Average Price
-----
TYP          9.75
WORK         1.76
CENT         1.63
IT          15.54
LEG          5.34
```

4.

Query

```
SQL> r
1 Select * from Stocks
2 Where (Price Between 10 and 20)
3* and (Not StockNo in (117, 118, 120))
```

Result

| STOCKNO | STOREC | DESCRIPTION | QUANTITY | UNITS | REORDER | PRICE | SUPPCO |
|---------|--------|----------------------|----------|--------|---------|-------|--------|
| 116 | IT | 3.5 in. floppy disks | 14 | Box 10 | 20 | 12.85 | S2 |

5.

Query

```
SQL> r
1 Select SuppName
2 From Suppliers, Stocks
3 Where Suppliers.SuppCode = Stocks.SuppCode
4 Group By SuppName
5* having Count(Distinct Storecode) >= 3
```

Result

```
SUPPNAME
-----
I.T. Supplies (Wales)
Office Matters
Fastorder Stationers
```

6.

Query

```
SQL> r
1 Select SuppName "Supplier Name",
2 Replace(Street||', '||Town||', '||County||', '||PostCode, ', ', ', ', ') as "Supplier Address"
3* From Suppliers
```

Result

| Supplier Name | Supplier Address |
|-----------------------|--|
| I.T. Supplies (Wales) | 3 Marlborough Ave., Cardiff, CF1 1IT |
| Fastorder Stationers | Riverside View, Newport, Gwent, NP1 7XJ |
| Office Matters | 20 Berrick Street, Bridgend, Mid Glam., CF38 3BB |
| Legal Services Ltd. | Westway Road, London, N8 8PA |
| TKG Tools Ltd. | 7 High Street, Swansea, SA7 2WG |
| Business Systems Ltd. | 155 Stradleigh Place, London, E10 6LL |

6 rows selected.

7.

Query

```
SQL> r
1 Select SuppCode, SuppName
2 From Suppliers
3 Where SuppCode Not in
4 (Select SuppCode From Orders
5* Where OrderNo = 2)
```

Result

| SUPP | SUPPNAME |
|------|-----------------------|
| S6 | Business Systems Ltd. |
| S4 | Office Matters |
| S5 | Legal Services Ltd. |
| S1 | TKG Tools Ltd. |
| S3 | Fastorder Stationers |

8.

Query

```
SQL> r
1 Select StockNo, Description, Price, Quantity
2 From Stocks
3 Where Price > (Select Avg(Price) From Stocks)
4* and StoreCode = 'LEG'
```

Result

| STOCKNO | DESCRIPTION | PRICE | QUANTITY |
|---------|-----------------------|-------|----------|
| 126 | Sealing wax | 7.99 | 9 |
| 127 | Red binding ribbon | 6.47 | 13 |
| 128 | A3 cream notary paper | 7.85 | 21 |

9.

Query

```
SQL> r
1 Select Stocks.StockNo, Stocks.Description, OrderItems.Qtyord
2 From Stocks, OrderItems
3* Where Stocks.StockNo = OrderItems.StockNo(+)
```

Result

| STOCKNO | DESCRIPTION | QTYORD |
|---------|-------------------------|--------|
| 102 | A4 headed paper | |
| 103 | Photocopying paper | |
| 104 | Coloured paper | |
| 105 | Sticky labels | |
| 106 | Sellotape | 10 |
| 107 | Drawing pins | |
| 108 | Staples | 10 |
| 109 | Window envelopes | |
| 110 | Large envelopes | |
| 111 | Black ballpoints | 10 |
| 112 | Coloured pens | |
| 113 | HB pencils | |
| 114 | Fluorescent markers | |
| 115 | 12 inch rulers | |
| 116 | 3.5 in. floppy disks | 10 |
| 117 | 5.25 in. floppy disks | 10 |
| 118 | Toner cartridges | |
| 119 | FX-100 printer ribbon | |
| 121 | Tipp-ex bottles | |
| 122 | Typewriter ribbons | |
| 123 | Audio cassettes | |
| 124 | Anti-static wipes | |
| 126 | Sealing wax | |
| 127 | Red binding ribbon | |
| 128 | A3 cream notary paper | |
| 129 | Coloured ink | |
| 130 | 8 x 1 inch wood screws | |
| 131 | 10 x 1 inch wood screws | |
| 132 | 13 amp electrical wire | |
| 134 | Electrical solder | |
| 135 | White spirit | |
| 137 | Masking tape | |
| 138 | Door hinges | |
| 139 | Angle brackets | |

34 rows selected.

10.

Query

```
SQL> r
1  Select SuppCode, SuppName, PostCode
2  From Suppliers
3  Where SuppCode not in
4  (Select Distinct(Suppcode)
5  From Stocks
6  Where Price <
7  (Select Avg(Price)
8* From Stocks))
```

Result

| SUPP | SUPPNAME | POSTCODE |
|------|-----------------------|----------|
| S6 | Business Systems Ltd. | E10 6LL |
| S5 | Legal Services Ltd. | N8 8PA |

11. Report Command

```
1 /* Table formatting */
2
3 clear screen;
4 accept Report_File char prompt 'Enter a file name for summary report ';
5
6 /* Column headers */
7
8 col StoreCode format A11 heading 'Store Code';
9 col Description format A23 heading 'Item Description';
10 col Price format $99.99 heading 'Price';
11 col Quantity format 9999999 heading 'Quantity';
12 col (Price*Quantity) format $99999.99 heading 'Value';
13
14 /* Formating and Titling pages */
15 set Pause off;
16 set Feedback off;
17 set Space 8;
18 set newpage 2;
19 set pagesize 57;
20 set linesize 91;
21 set underline =;
22 ttitle center 'Current Stock Value by Store' skip 2 left -
23 'prepared by ' &Reporting_Officer right -
24 &Todays_Date skip 4;
25 btitle center format 999 SQL.PNO;
26
27 /* Breaks and Computes */
28
29 break on StoreCode skip 2 on Description skip 1 on Report;
30 compute sum label 'Store Total' of (Price*Quantity) on StoreCode;
31 compute sum label 'Grand Total' of (Price*Quantity) on Report;
32
33 /* Selecting data & sending to file */
34
35 spool &Report_File;
36
37 select StoreCode, Description, Price, Quantity, (Price*Quantity)
38 from Stocks
39 order by StoreCode, Description;
40
41 spool off;
42
43 /* Clearing all settings */
44
45 clear breaks;
46 clear columns;
47 clear computes;
48 set Pause on;
```

Result

| Current Stock Value by Store | | | | |
|------------------------------|-----------------------|---------|------------|----------|
| prepared by SpyrosLontos | | | 23/11/2018 | |
| Store Code | Item Description | Price | Quantity | Value |
| ===== | ===== | ===== | ===== | ===== |
| CENT | 12 inch rulers | \$.22 | 23 | \$5.06 |
| | A4 headed paper | \$4.11 | 17 | \$69.87 |
| | Black ballpoints | \$2.42 | 6 | \$14.52 |
| | Drawing pins | \$.47 | 37 | \$17.39 |
| | Fluorescent markers | \$1.89 | 2 | \$3.78 |
| | HB pencils | \$1.97 | 22 | \$43.34 |
| | Photocopying paper | \$2.98 | 30 | \$89.40 |
| | Sellotape | \$.45 | 21 | \$9.45 |
| | Staples | \$.42 | 11 | \$4.62 |
| | Tipp-ex bottles | \$.81 | 35 | \$28.35 |
| | Window envelopes | \$2.15 | 22 | \$47.30 |
| ***** | ***** | | | ----- |
| Store Total | | | | \$333.08 |
| IT | 3.5 in. floppy disks | \$12.85 | 14 | \$179.90 |
| | 5.25 in. floppy disks | \$11.38 | 32 | \$364.16 |
| | Anti-static wipes | \$4.95 | 18 | \$89.10 |
| | Toner cartridges | \$32.99 | 7 | \$230.93 |
| ***** | ***** | | | ----- |
| Store Total | | | | \$864.09 |
| LEG | A3 cream notary paper | \$7.85 | 21 | \$164.85 |
| | Coloured ink | \$3.48 | 22 | \$76.56 |
| | Coloured pens | \$3.65 | 17 | \$62.05 |
| | Large envelopes | \$2.57 | 8 | \$20.56 |

Current Stock Value by Store

prepared by SpyrosLontos

23/11/2018

| Store Code | Item Description | Price | Quantity | Value |
|-------------|-------------------------|---------|----------|--------------------|
| ===== | ===== | ===== | ===== | ===== |
| LEG | Red binding ribbon | \$6.47 | 13 | \$84.11 |
| | Sealing wax | \$7.99 | 9 | \$71.91 |
| ***** | ***** | | | ----- |
| Store Total | | | | \$480.04 |
| TYP | Audio cassettes | \$8.58 | 8 | \$68.64 |
| | Coloured paper | \$5.15 | 13 | \$66.95 |
| | FX-100 printer ribbon | \$23.99 | 25 | \$599.75 |
| | Sticky labels | \$4.83 | 45 | \$217.35 |
| | Typewriter ribbons | \$6.19 | 16 | \$99.04 |
| ***** | ***** | | | ----- |
| Store Total | | | | \$1051.73 |
| WORK | 10 x 1 inch wood screws | \$1.35 | 13 | \$17.55 |
| | 13 amp electrical wire | \$1.84 | 22 | \$40.48 |
| | 8 x 1 inch wood screws | \$2.85 | 8 | \$22.80 |
| | Angle brackets | \$2.85 | 18 | \$51.30 |
| | Door hinges | \$2.14 | 24 | \$51.36 |
| | Electrical solder | \$1.59 | 11 | \$17.49 |
| | Masking tape | \$.49 | 8 | \$3.92 |
| | White spirit | \$.98 | 6 | \$5.88 |
| ***** | ***** | | | ----- |
| Store Total | | | | \$210.78 |
| Grand Total | | | | ----- \$2939.72 |