



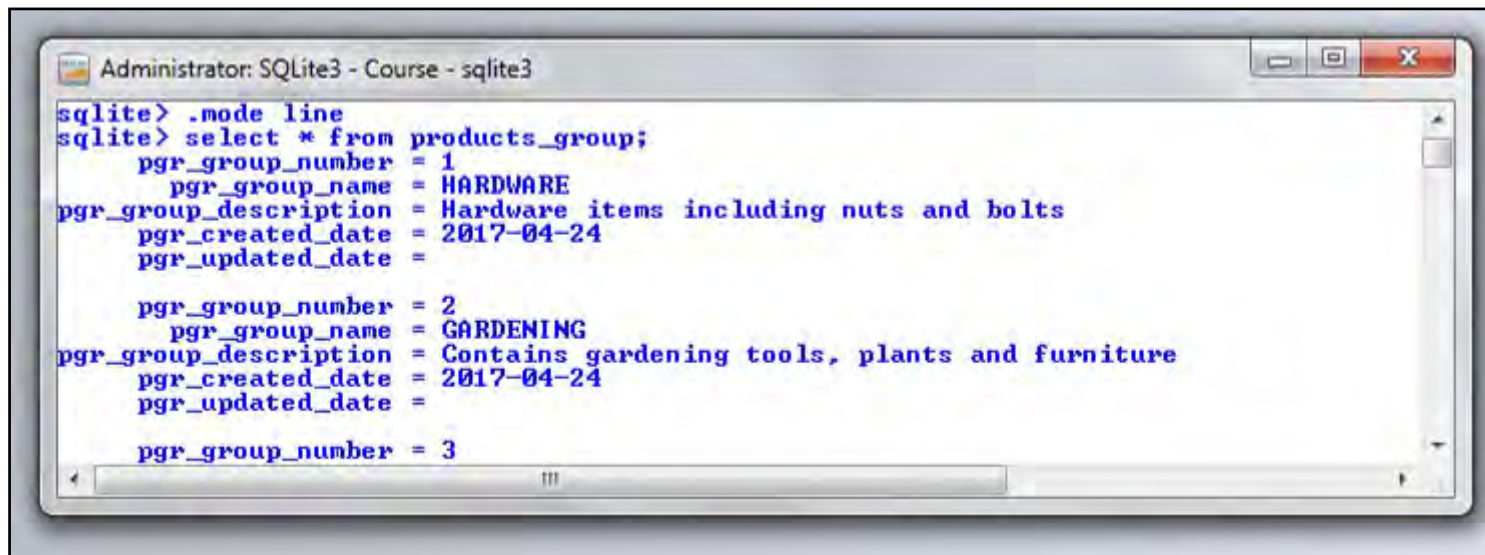
.mode insert - Creates an SQL statement of the data which can be reapplied to the table or a table of similar structure in another Database ...

```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode insert
sqlite> select * from products_group;
INSERT INTO table(pgr_group_number,pgr_group_name,pgr_group_description,pgr_created_date,pgr_updated_date) VALUES(1,'HARDWARE','Hardware items including nuts and bolts','2017-04-24',NULL);
INSERT INTO table(pgr_group_number,pgr_group_name,pgr_group_description,pgr_created_date,pgr_updated_date) VALUES(2,'GARDENING','Contains gardening tools, plants and furniture','2017-04-24',NULL);
INSERT INTO table(pgr_group_number,pgr_group_name,pgr_group_description,pgr_created_date,pgr_updated_date) VALUES(3,'BUILDING','Building materials','2017-04-24',NULL);
INSERT INTO table(pgr_group_number,pgr_group_name,pgr_group_description,pgr_created_date,pgr_updated_date) VALUES(4,'DECORATING','Contains wallpaper and paint, etc','2017-04-24',NULL);
INSERT INTO table(pgr_group_number,pgr_group_name,pgr_group_description,pgr_created_date,pgr_updated_date) VALUES(5,'BATHROOM','Bathroom suites and accessories','2017-04-24',NULL);
sqlite> _
```

Database Navigation – Changing the output style (mode)



.mode line - One value per line, essentially this produces a 'form' of the data, each column and its name displayed on a single line, each row separated by a blank line ...



```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode line
sqlite> select * from products_group;
  pgr_group_number = 1
  pgr_group_name   = HARDWARE
pgr_group_description = Hardware items including nuts and bolts
  pgr_created_date = 2017-04-24
  pgr_updated_date =

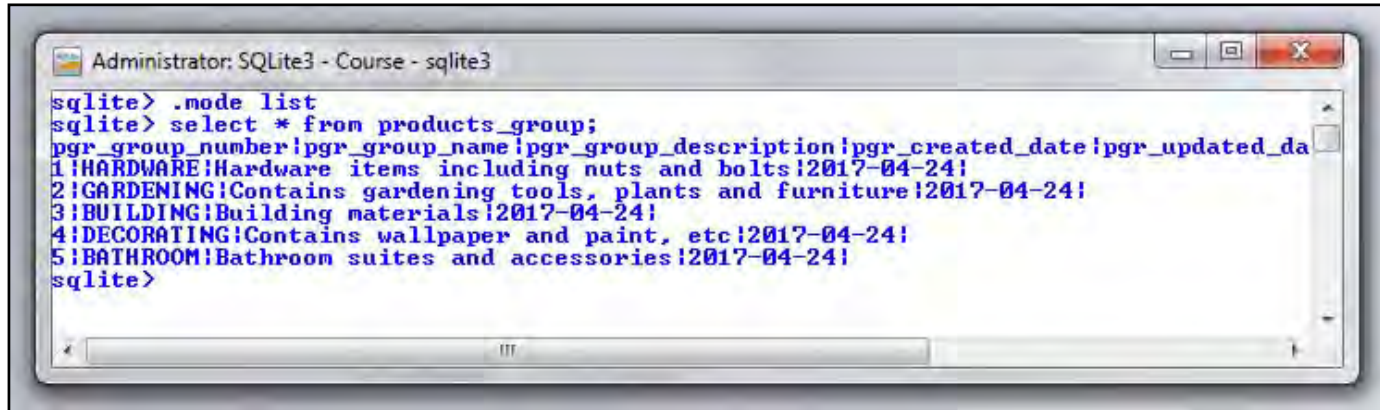
  pgr_group_number = 2
  pgr_group_name   = GARDENING
pgr_group_description = Contains gardening tools, plants and furniture
  pgr_created_date = 2017-04-24
  pgr_updated_date =

  pgr_group_number = 3
```

Database Navigation – Changing the output style (mode)

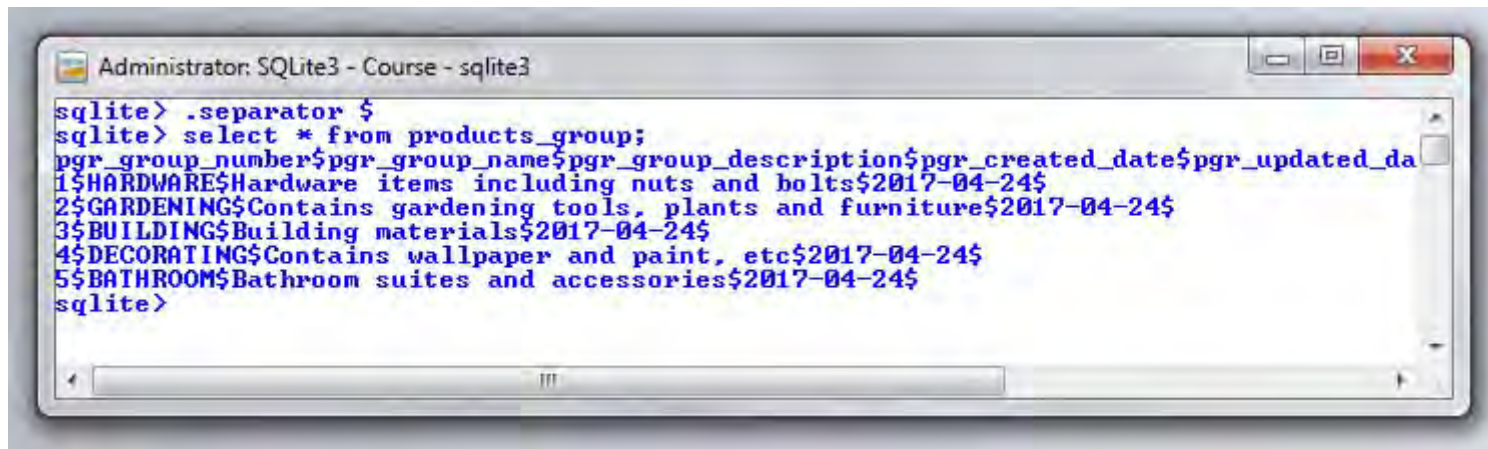


.mode list – The default output, each column separated by a pipe ...



```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode list
sqlite> select * from products_group;
pgr_group_number|pgr_group_name|pgr_group_description|pgr_created_date|pgr_updated_da
1|HARDWARE|Hardware items including nuts and bolts|2017-04-24|
2|GARDENING|Contains gardening tools, plants and furniture|2017-04-24|
3|BUILDING|Building materials|2017-04-24|
4|DECORATING|Contains wallpaper and paint, etc|2017-04-24|
5|BATHROOM|Bathroom suites and accessories|2017-04-24|
sqlite>
```

The separator can be changed using the *.separator* option ...

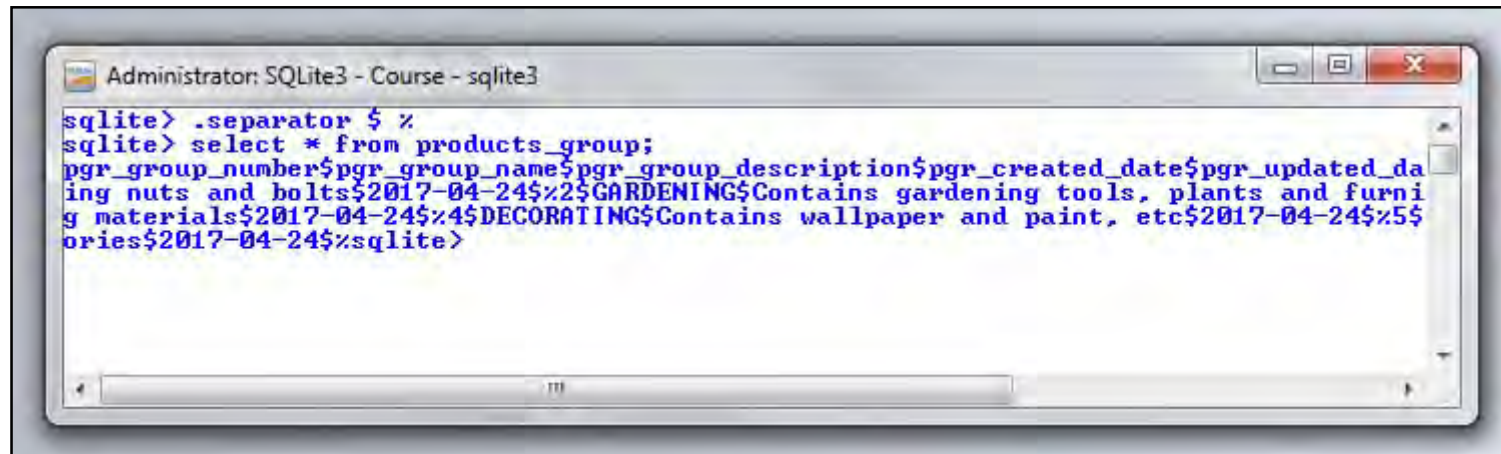


```
Administrator: SQLite3 - Course - sqlite3
sqlite> .separator $
sqlite> select * from products_group;
pgr_group_number$pgr_group_name$pgr_group_description$pgr_created_date$pgr_updated_da
1$HARDWARE$Hardware items including nuts and bolts$2017-04-24$
2$GARDENING$Contains gardening tools, plants and furniture$2017-04-24$
3$BUILDING$Building materials$2017-04-24$
4$DECORATING$Contains wallpaper and paint, etc$2017-04-24$
5$BATHROOM$Bathroom suites and accessories$2017-04-24$
sqlite>
```

Database Navigation – Changing the output style (mode)



A second optional separator parameter can be specified for the end of row marker, by default this is a line break, in this example it uses a percentage sign which in turn removes the line break ...

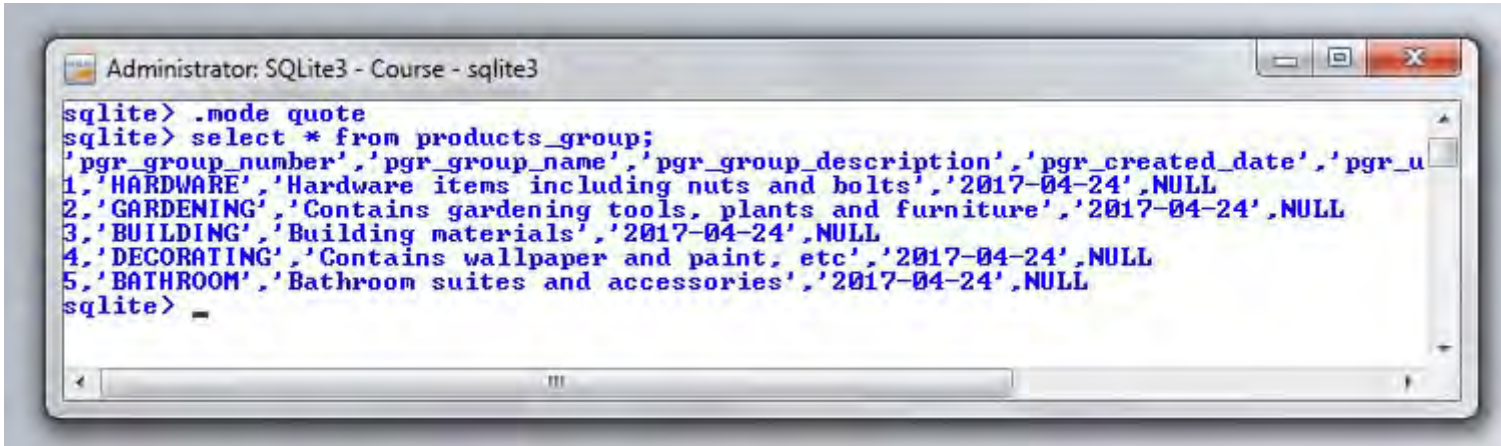


```
Administrator: SQLite3 - Course - sqlite3
sqlite> .separator $ %
sqlite> select * from products_group;
pgr_group_number$pgr_group_name$pgr_group_description$pgr_created_date$pgr_updated_date
ing nuts and bolts$2017-04-24$%2$GARDENING$Contains gardening tools, plants and furni
g materials$2017-04-24$%4$DECORATING$Contains wallpaper and paint, etc$2017-04-24$%5$
ories$2017-04-24$%sqlite>
```

Database Navigation – Changing the output style (mode)



.mode quote – Places quotes around all text values, any rows with null values will display NULL in the output ...

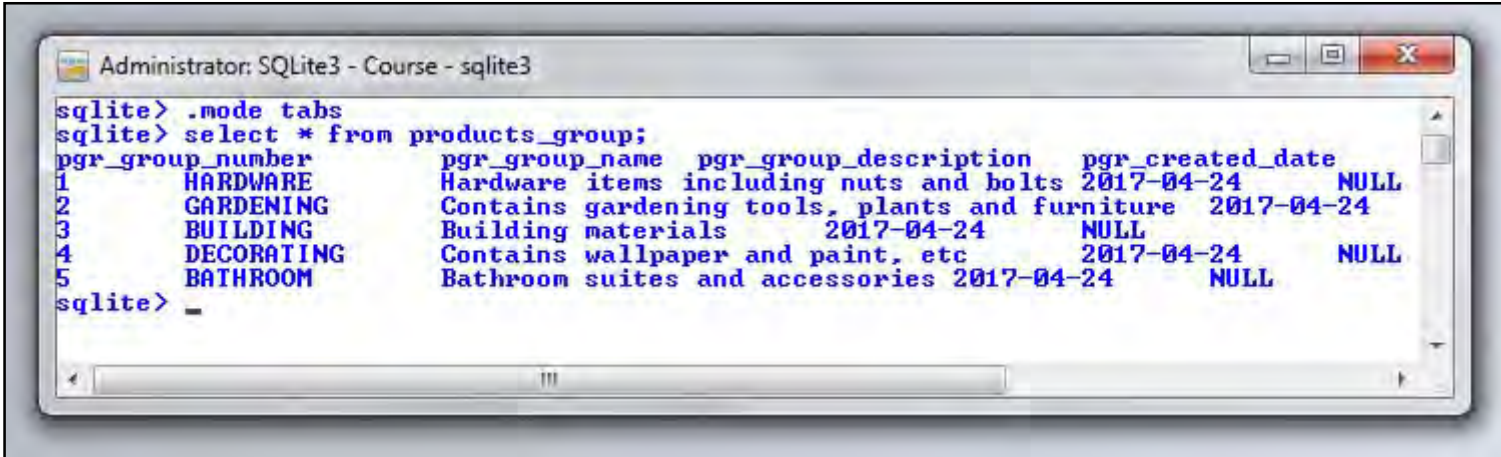


```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode quote
sqlite> select * from products_group;
'pgr_group_number','pgr_group_name','pgr_group_description','pgr_created_date','pgr_u
1,'HARDWARE','Hardware items including nuts and bolts','2017-04-24',NULL
2,'GARDENING','Contains gardening tools, plants and furniture','2017-04-24',NULL
3,'BUILDING','Building materials','2017-04-24',NULL
4,'DECORATING','Contains wallpaper and paint, etc','2017-04-24',NULL
5,'BATHROOM','Bathroom suites and accessories','2017-04-24',NULL
sqlite> -
```

Database Navigation – Changing the output style (mode)



.mode tabs – Separates each column with a tab, text columns are enclosed with a single quotation and columns without values are output as NULL ...



```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode tabs
sqlite> select * from products_group;
pgr_group_number    pgr_group_name    pgr_group_description    pgr_created_date
1    HARDWARE    Hardware items including nuts and bolts    2017-04-24    NULL
2    GARDENING    Contains gardening tools, plants and furniture    2017-04-24
3    BUILDING    Building materials    2017-04-24    NULL
4    DECORATING    Contains wallpaper and paint, etc    2017-04-24    NULL
5    BATHROOM    Bathroom suites and accessories    2017-04-24    NULL
sqlite> _
```

Database Navigation – Changing the output style (mode)



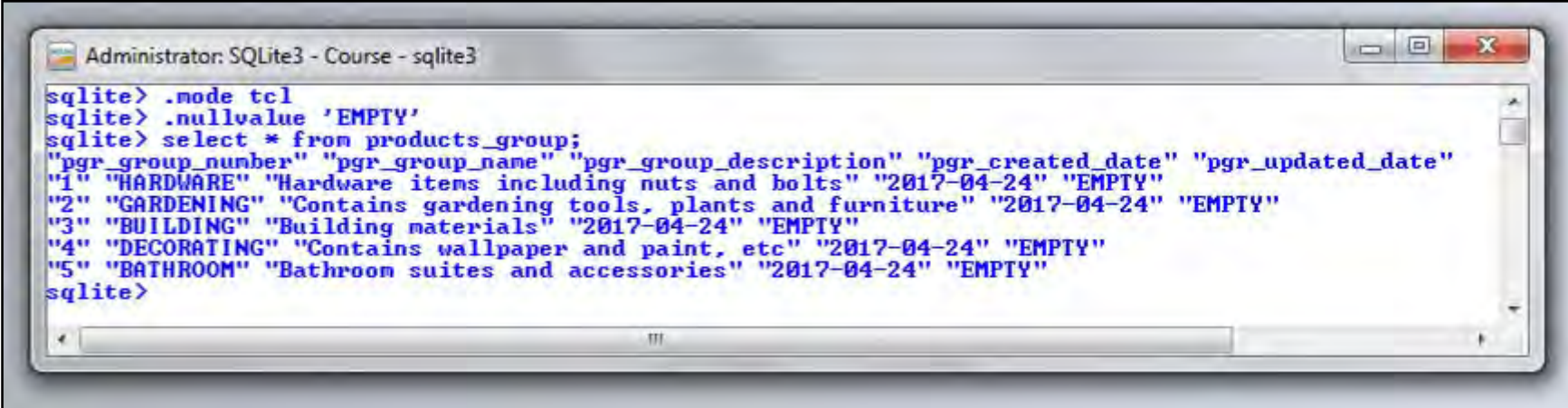
In addition, by specifying `.nullvalue` the User can change the default 'NULL' to a different value ...

```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode tabs
sqlite> .nullvalue 'EMPTY'
sqlite> select * from products_group;
pgr_group_number  pgr_group_name  pgr_group_description  pgr_created_date  pgr_created_date
1      HARDWARE      Hardware items including nuts and bolts  2017-04-24      EMPTY
2      GARDENING     Contains gardening tools, plants and furniture  2017-04-24
3      BUILDING     Building materials      2017-04-24      EMPTY
4      DECORATING   Contains wallpaper and paint, etc      2017-04-24      EMPTY
5      BATHROOM     Bathroom suites and accessories  2017-04-24      EMPTY
sqlite>
```

Database Navigation – Changing the output style (mode)



.mode tcl – TCL is the underlying language behind SQLite, this mode places all columns including numbers and dates in double quotes, it also incorporates the values in the *.nullvalue* option ...

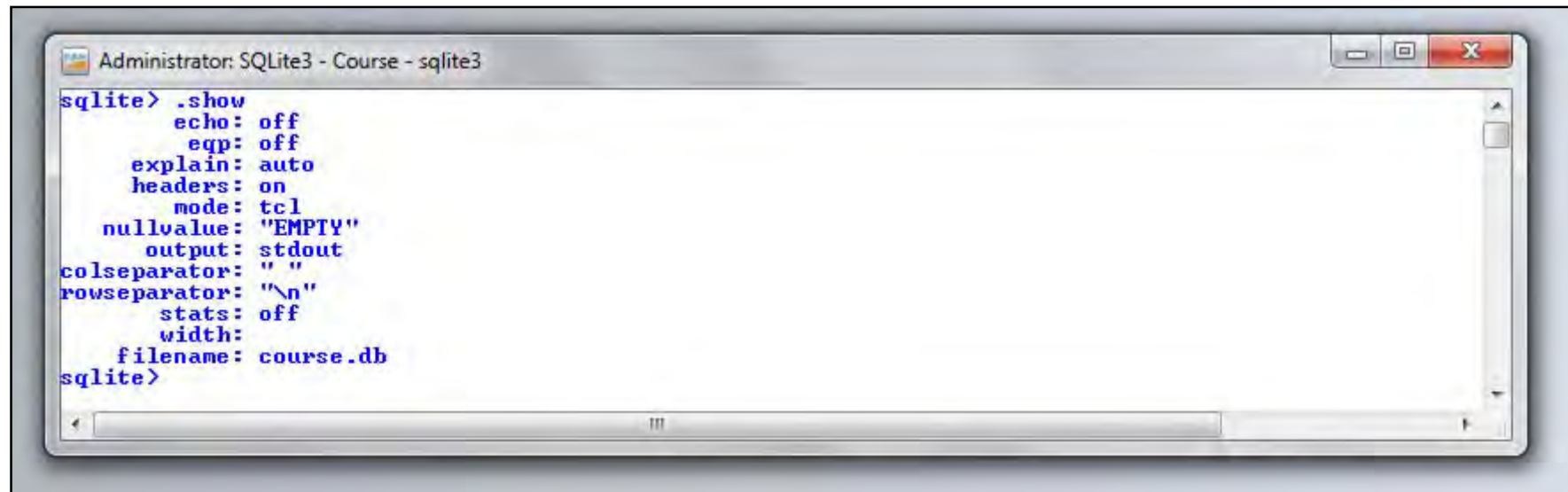


```
Administrator: SQLite3 - Course - sqlite3
sqlite> .mode tcl
sqlite> .nullvalue 'EMPTY'
sqlite> select * from products_group;
"pgr_group_number" "pgr_group_name" "pgr_group_description" "pgr_created_date" "pgr_updated_date"
"1" "HARDWARE" "Hardware items including nuts and bolts" "2017-04-24" "EMPTY"
"2" "GARDENING" "Contains gardening tools, plants and furniture" "2017-04-24" "EMPTY"
"3" "BUILDING" "Building materials" "2017-04-24" "EMPTY"
"4" "DECORATING" "Contains wallpaper and paint, etc" "2017-04-24" "EMPTY"
"5" "BATHROOM" "Bathroom suites and accessories" "2017-04-24" "EMPTY"
sqlite>
```


Database Navigation – Changing the output style (mode)



.mode as with most settings on the SQLite command line are session specific and will last until the User exits the session at any time, .show will reveal all the current settings ...



```
Administrator: SQLite3 - Course - sqlite3
sqlite> .show
  echo: off
  eqp: off
  explain: auto
  headers: on
  mode: tcl
  nullvalue: "EMPTY"
  output: stdout
colseparator: " "
rowseparator: "\n"
  stats: off
  width:
  filename: course.db
sqlite>
```