

Ch 5 Tutorial

Created by Jack

Create and Call 5-14

The screenshot shows a SQL IDE interface with a dark theme. The left sidebar displays a database schema for 'dba221db' with tables like departments, employees, and locations. The main editor window shows the SQL script for creating and calling a stored procedure named 'initial_read_loop_5_14'. The script includes comments, variable declarations, a cursor, and a loop. The bottom panel shows the execution results, indicating that the procedure was executed successfully with a cost of 13ms and a total of 1 row returned.

```
1  --
2  name: jack tercheria
3  date: 2/26/2025
4  description: create example 5 14
5  */
6  >Run() DSelect
7  CREATE PROCEDURE initial_read_loop_5_14()
8  BEGIN
9      DECLARE no_more_departments INT;
10     DECLARE l_department_id INT;
11     DECLARE l_department_name INT;
12     DECLARE l_location INT;
13     DECLARE l_emp_count INT;
14     DECLARE l_department_count INT DEFAULT 0;
15
16     DECLARE dept_csr CURSOR FOR
17     SELECT department_id, department_name, location
18     FROM departments;
19
20     DECLARE CONTINUE HANDLER FOR NOT FOUND SET no_more_departments=1;
21
```

Result1

Search Results

(l_department_count) int

> 30

Ln 45, Col 30 Spaces: 8 UTF-8 CRLF () MS SQL

Weather alert Just issued

Search

11:32 PM 2/28/2025

Create and Call 5-17

The screenshot displays a SQL IDE interface with a dark theme. The left sidebar shows a database tree for 'test 104.28-MariaDB' with tables like 'departments', 'employees', and 'enum_test'. The main editor shows a script for creating a stored procedure named 'nested_cursor_while_loop_5_17()'. The script includes comments for author and date, and SQL code for declaring variables, cursors, and a loop. The bottom panel shows the execution results of a query: 'CONCAT("Department 10 has 99 empl)'. The status bar at the bottom indicates the current line and column (Ln 60, Col 38) and the active database (dba221db).

```
1  -- name: jack tercheria
2  -- date: 2/26/2025
3  -- description: create example 5 17
4
5  */
6  -- Run | DSelect
7  CREATE PROCEDURE nested_cursor_while_loop_5_17()
8  READS SQL DATA
9  BEGIN
10     DECLARE l_department_id INT;
11     DECLARE l_employee_id INT;
12     DECLARE l_emp_count INT DEFAULT 0;
13     DECLARE l_last_dept INT DEFAULT 0;
14
15     DECLARE dept_csr CURSOR FOR
16     SELECT department_id FROM departments
17     LIMIT 5;
18
19     DECLARE emp_csr CURSOR FOR
20     SELECT employee_id FROM employees
21     WHERE department_id = l_department_id;
```

Result1

Q Search Results

Q CONCAT("Department 10 has 99 empl)

Department 10 has 99 empl

Ln 60, Col 38 Spaces: 4 UTF-8 CRLF MS SQL

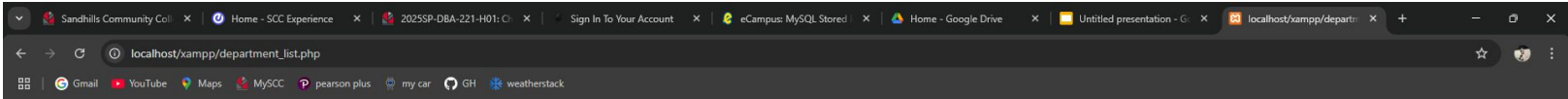
Create 5-21

The screenshot shows a Visual Studio Code editor with a PHP script named `department_list_JET.php` open. The script is located at `D:\spring2025 > DB PROG II > scripts > Ch05Tut > department_list_JET.php`. The script includes a header with a name, date, and description, followed by an HTML table structure. The PHP code connects to a MySQL database named `dba221db` on host `127.0.0.1` using the `root` user. It checks the connection and then queries the `department_list` table, displaying the results in an HTML table.

```
1  /*
2  name: jack tercheria
3  date: 2/26/2025
4  description: example 5-21
5  */
6  <html>
7  <body>
8      <h1>Department Listing</h1>
9      <table border="1" width="90">
10         <tr><td><b>Department ID</b></td>
11         <td><b>Department Name</b></td>
12     </tr>
13 <?php
14     $hostname="127.0.0.1";
15     $username="root";
16     $password="";
17     $database="dba221db";
18
19     $p1="";
20     $p2="";
21
22     $dbh = new mysqli($hostname, $username, $password, $database);
23
24     /* Check connection */
25
26     if (mysqli_connect_errno()) {
27         printf("Connection failed: %s\n", mysqli_connect_error());
28         exit();
29     }
30
31     if ($result_set = $dbh->query("call department_list()")) {
32         printf("");
33         while($row=$result_set->fetch_object()) {
34             printf("<tr><td>%s</td><td>%s</td></tr>\n",
35                 $row->DEPARTMENT_ID, $row->DEPARTMENT_NAME);
36         }
37     }
38     else /* query failed */
39     {
40         printf("<p>Error retrieving stored procedure result set:%d %s\n</p>", mysqli_errno($dbh),mysqli_sqlstate($dbh),mysqli_error($dbh));
41         $dbh->close( ); exit( );
42     }
43
44     /* free result set */
45     $result_set->close();
46     $dbh->close();
```

The left sidebar shows a database explorer with a table named `department_list` in the `dba221db` database. The table has two columns: `DEPARTMENT_ID` and `DEPARTMENT_NAME`. The bottom status bar shows the file is `Ln 5, Col 3` in `UTF-8` encoding with `CRLF` line endings.

Call 5-21



/* name: jack tercheria date: 2/26/2025 description: example 5-21 */

Department Listing

Department ID	Department Name
1	DUPLIN
2	MADISON
3	MCHENRY
4	CHARITON
5	SUMMERS
6	LINCOLN
7	CHAMPAIGN
8	WILKES
9	CRAVEN
10	COTTONWOOD
11	TAZEWELL
12	WHATCOM
13	OPTIMIZER RESEARCH
14	KING
15	SMITH
16	GASTON
17	MARSHALL
18	ROCKINGHAM
19	JACKSON
20	ROCK ISLAND
21	HARDIN
22	NASSAU
23	PIKE
24	RIVERSIDE
25	BERKSHIRE
26	VENTURA
27	WOOD
28	CUMBERLAND
29	CAMDEN
30	HOWELL

Create and Call 5-28

The screenshot shows a database IDE with a dark theme. The left sidebar displays a database structure for 'test 104.28-MariaDB', including tables like 'departments', 'employees', 'enum_test', 'limit_test', 'locations', 'max_sales_by_custome...', 'products', 'product_codes', 'sales', and 'timestamp_check'. The main editor window shows a SQL script for creating a stored procedure and executing a query. The bottom pane displays the results of the query, which is a table with 12 columns and 12 rows of data.

```
1  /*
2      name: jack tercheria
3      date: 2/28/2025
4      description: create example 5 28
5  */
6  D Run | D Select
7  CREATE PROCEDURE sp_customer_search(in_customer_name VARCHAR(30),
8      in_contact_surname VARCHAR(30),
9      in_contact_firstname VARCHAR(30),
10     in_phoneno VARCHAR(12))
11 BEGIN
12     SELECT *
13     FROM customers
14     WHERE (customer_name LIKE in_customer_name
15           OR in_contact_surname IS NULL)
16           AND (contact_surname LIKE in_contact_surname
17               OR in_contact_surname IS NULL)
18           AND (contact_firstname LIKE in_contact_firstname
19               OR in_contact_firstname IS NULL)
20           AND (phoneno LIKE in_phoneno
21               OR in_phoneno IS NULL);
```

CUSTOMER_ID	CUSTOMER_NAME	CONTACT SURNAME	CONTACT FIRSTNAM	ADDRESS1	ADDRESS2	ZIPCODE	DATE OF BIRTH	PHONENO	SALES_REP_ID	COMMENT II
int	varchar	varchar	varchar	varchar	varchar	varchar	datetime	varchar	decimal	decimal
1	GRAPHIX ZONE INC DE	LINDEN	ARENTINA	3108 ODOROUSNESS BOUL	FLAGSTAFF	54751	1982-03-07 11:03:52	(662) 980-47	1	0
2	MASSBANK CORP	STEIN	INGRAM	1886 SNAKES STREET	LOCKLAND	72350	1977-06-14 02:06:54	(216) 799-99	2	0
3	LARSCOM INC	LANCE	CORAZON	3223 ASPECT LANE	BAILEY CREEK	57791	1950-06-08 05:06:54	(362) 390-29	3	0
4	AGES HEALTH AAAIsWAAAB	FORSTER	LENORA	2174 MISINFORMED AVEN	BROWNING	12133	1956-12-31 10:12:14	(402) 484-56	4	0
5	McTavish	CHAMBLISS	ROMNEY	5627 TOWNS BOULEVARD	FAIRVIEW PARK	50265	1983-03-18 06:03:48	(327) 244-36	5	0
6	PEGASUS COMMUNICATIO	SHEEHY	WYELIE	7827 PORTAGE DRIVE	HENSRLER	32595	1958-04-17 03:04:50	(400) 924-86	6	0
7	PHILADELPHIA AAAIsWAAAB	KENDALL	ZYL	7521 MANUFACTURED STR	NOATAK	23127	1967-07-02 02:07:14	(394) 788-83	7	0
8	SISKON GOLD AAAIsWAAAB	WASHINGTON	CHANDRA	10483 SLURS CIRCLE	PRAIRIE CITY	51001	1956-03-05 02:03:37	(774) 807-27	8	0
9	SUNAMERICA I AAAIsWAAAB	BURGESS	MADELAINE	4197 DINGHY BOULEVARD	BAKERSVILLE	46158	1969-01-12 05:01:11	(452) 262-91	9	0
10	MERCURY FINA AAAIsWAAAE	HAMMILL	NESSA	1878 HITS STREET	CAROLINA	57062	1973-10-17 01:10:00	(547) 978-66	10	0
11	CRSS INC. AAAIsWAAABAAAF	NETTLES	LISE	5813 CINCINNATI STREET	RYE PATCH	38137	1972-11-29 01:11:13	(493) 701-66	11	0
12	SHOWBIZ PIZZ AAAIsWAAAB	LUKE	SIZA	9551 BONY DRIVE	LITTLE RIVER	72110	1981-09-12 08:09:36	(778) 691-37	12	0

Create and Call 5-29

The screenshot shows a SQL IDE with a dark theme. On the left, a database schema for 'dba221db' is visible, showing tables like 'customers' and 'products'. The main editor displays a SQL script for creating a procedure and inserting data. The script includes comments and SQL syntax for creating a procedure named 'sp_customer_search_dyn' and inserting a record into the 'customers' table.

```
1  /*
2  name: jack tercheria
3  date: 2/28/2025
4  description: create example 5 29
5  */
6  CREATE PROCEDURE sp_customer_search_dyn(in_customer_name VARCHAR(30),
7                                         in_contact_surname VARCHAR(30),
8                                         in_contact_firstname VARCHAR(30),
9                                         in_phoneno VARCHAR(12))
10 BEGIN
11
12     DECLARE l_where_clause VARCHAR(1000) DEFAULT 'WHERE';
13
14     IF in_customer_name IS NOT NULL THEN
15         SET l_where_clause=CONCAT(l_where_clause,
16                                   ' customer_name="",in_customer_name,"");
17     END IF;
18
19     IF in_contact_surname IS NOT NULL THEN
20         SET l_where_clause=CONCAT(l_where_clause,
21                                   ' contact_surname="",in_contact_surname,"");
22     END IF;
23
24     IF in_contact_firstname IS NOT NULL THEN
25         SET l_where_clause=CONCAT(l_where_clause,
26                                   ' contact_firstname="",in_contact_firstname,"");
27     END IF;
28
29     IF in_phoneno IS NOT NULL THEN
30         SET l_where_clause=CONCAT(l_where_clause,
31                                   ' phoneno="",in_phoneno,"");
32     END IF;
33
34     INSERT INTO customers (customer_name, contact_surname, contact_firstname, phoneno, address1, address2, zipcode, date_of_birth, sales_rep_id, comment_id)
35     VALUES ('', '', '', '', '5627 TOWNS BOULEVARD', 'FAIRVIEW PARK', '50265', '1983-03-18 06:03:48', '5', '0');
36 END
```

The bottom of the IDE shows a table with the following data:

CUSTOMER_ID	CUSTOMER_NAME	CONTACT_SURNAME	CONTACT_FIRSTNAME	ADDRESS1	ADDRESS2	ZIPCODE	DATE OF BIRTH	PHONENO	SALES_REP_ID	COMMENT_ID
5	McTavish	CHAMBLISS	ROMNEY	5627 TOWNS BOULEVARD	FAIRVIEW PARK	50265	1983-03-18 06:03:48	(327) 244-36	5	0