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HIGH LEVEL LANGUAGE EXTENSION WITH CURSORS

Program 1
Write a Cursor program using MySQL to retrieve the email-ids(build an email list) of employees from employeestable.

SOLUTION :
create table employees(id integer, Name varchar(100), email varchar(100)); insert into employees(id,Name, email) values(1, "Harry Potter", "pharry@warnerbros.com");
insert into employees(id, Name, email) values(2, "Clark Kent","kclark@dccomics.com");
insert into employees(id, Name, email) values(3, "Tony Stark", "stony@marvel.com");

```
DELIMITER $$
CREATE PROCEDURE build_email_list (INOUT
email_listvarchar(4000))BEGIN
DECLARE v_finished INTEGER DEFAULT 0;
DECLARE v_emailvarchar(100) DEFAULT "";

-- declare cursor for employee email

DECIAREemail_cursor CURSOR FOR
SELECT email FROM employees;

-- declare NOT FOUND handler
DECLARE CONTINUE HANDLER FOR
NOT FOUND SET v_finished = 1;
OPEN
email_cursor;
get_email: LOOP
FETCH email_cursor INTO
v_email;IF v_finished = 1 THEN
LEAVE get_email;
END IF;

-- build email list

SET email_list = CONCAT(v_email,";",email_list);
END LOOP get_email;
CLOSEemail_cursor;
```

-- Calling the procedure and getting the email list

```
SET @email_list = "";
CALL build_email_list(@email_list);
SELECT @email_list;
```

Program :-1

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE build_email_list (INOUT email_list varchar(4000))
    -> BEGIN
    -> DECLARE v_finished INTEGER DEFAULT 0;
    ->      DECLARE v_email varchar(100) DEFAULT "";
    -> DECLARE email_cursor CURSOR FOR
    -> SELECT email FROM employees;
    -> DECLARE CONTINUE HANDLER FOR
    ->      NOT FOUND SET v_finished = 1;
    -> OPEN email_cursor;
    -> get_email:LOOP
    -> FETCH email_cursor INTO v_email;
    -> IF v_finished = 1 THEN
    -> LEAVE get_email;
    -> END IF;
    -> SET email_list = CONCAT(v_email,";",email_list);
    -> END LOOP get_email;
    -> CLOSE email_cursor;
    -> END $$
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER ;
mysql> SET @email_list = "";
Query OK, 0 rows affected (0.00 sec)

mysql> CALL build_email_list(@email_list);
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> select @email_list;
+-------------------------------------------------------------+
| @email_list                                                 |
+-------------------------------------------------------------+
| stony@marvel.com;kclark@deconics.com;pharry@warnerbros.com; |
+-------------------------------------------------------------+
1 row in set (0.00 sec)
```

RESULT:
stony@marvel.com;kclark@dccomics.com;pharry@warnerbros.com;