

Indian Institute of Information Technology Dharwad

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Course : DBMS (CS310)

Task : Lab Assignment-7

AIM :

The main purpose of doing this assignment to do handson to create 'stored function' and 'stored procedure' .

Code Snippet :

```
/* ASSIGNMENT-7 : stored function & stored procedure*/
```

```
DELIMITER $$
```

```
create function get_title( salary int)
```

```
returns varchar(50)
```

```
deterministic
```

```
begin
```

```
    declare title varchar(50);
```

```
    if salary < 70000 then
```

```
        set title = 'intern';
```

```
    elseif (salary >= 70000 and salary < 80000) then
```

```
        set title='senior engineer';
```

```
    elseif salary >= 80000 then
```

```
        set title='team leader';
```

```
    end if;
```

```
    return(title);
```

```
END$$
```

DELIMITER;

select firstname, salary, get_title(salary) from employee;

delimiter \$\$

create procedure get_avg_salary()

begin

select avg(salary) from employee;

end;

call get_avg_salary() ;

delimiter \$\$

create procedure get_min_salary()

begin

select min(salary) from employee;

end;

call get_min_salary() ;

delimiter \$\$

create procedure get_max_salary()

begin

select max(salary) from employee;

end;

call get_max_salary();

Screenshots:

The first screenshot shows the MySQL Workbench interface with the SQL editor open. The editor contains the following SQL code:

```
124  /* stored function */
125  DELIMITER $$
126  • create function get_title( salary int)
127  returns varchar(50)
128  deterministic
129  begin
130      declare title varchar(50);
131      if salary < 70000 then
132          set title = 'intern';
133      elseif (salary >= 70000 and salary < 80000) then
134          set title='senior engineer';
135      elseif salary >= 80000 then
136          set title='team leader';
137      end if;
138      return(title);
139  end
140  DELIMITER;
```

The output window shows the following messages:

#	Time	Action	Message	Duration / Fetch
22	00:40:31	select firstname, get_title(salary) from employee LIMIT 0, 1000	Error Code: 1305. FUNCTION mysql.get_title does not exist	0.797 sec
23	00:43:16	create function get_title(salary int) returns varchar(50) deterministic begin declare title var...	0 row(s) affected	0.547 sec
24	00:43:42	select firstname, get_title(salary) from employee LIMIT 0, 1000	9 row(s) returned	0.109 sec / 0.000 sec
25	00:44:08	select firstname, salary, get_title(salary) from employee LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec

The second screenshot shows the same MySQL Workbench interface, but the SQL editor now contains the following SQL code:

```
137      end if;
138      return(title);
139  end
140  DELIMITER;
```

The output window shows the following messages:

#	Time	Action	Message	Duration / Fetch
23	00:43:16	create function get_title(salary int) returns varchar(50) deterministic begin declare title var...	0 row(s) affected	0.547 sec
24	00:43:42	select firstname, get_title(salary) from employee LIMIT 0, 1000	9 row(s) returned	0.109 sec / 0.000 sec
25	00:44:08	select firstname, salary, get_title(salary) from employee LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec
26	00:44:58	select firstname, salary, get_title(salary) from employee LIMIT 0, 1000	9 row(s) returned	0.016 sec / 0.000 sec

The result grid shows the following data:

firstname	salary	get_title(salary)
Alex	60000.00	intern
Bon	50000.00	intern
Mler	70000.00	senior engineer
Zender	80000.00	team leader
Bel	65000.00	intern
Mac	68000.00	intern
yerx	76000.00	senior engineer
John	78000.00	team leader
Mac	68000.00	intern

MySQL Workbench

login by Dhanish

File Edit View Query Database Server Tools Scripting Help

Navigator: 20bcs040_assignment (SQL scrip... 20bcs040_assignment (SQL scr... SQL File 5* 20bcs040_assignment-06* SQL File

SCHEMAS

Filter objects

hospitaldb
railway
sys

Administration Schemas

Information

No object selected

151 delimiter \$\$
152 create procedure get_min_salary()
153 begin
154 select min(salary) from employee;
155 end;
156 call get_min_salary();

Result Grid

min(salary)
50000.00

Result 10

Output

Action Output

#	Time	Action	Message	Duration / Fetch
32	00:57:15	call get_avg_salary	Error Code: 1318. Incorrect number of arguments for PROCEDURE mysql.get_avg_salary; ex...	0.000 sec
33	00:57:32	call get_avg_salary	Error Code: 1318. Incorrect number of arguments for PROCEDURE mysql.get_avg_salary; ex...	0.000 sec
34	01:00:34	create procedure get_min_salary() begin select min(salary) from employee; end;	0 row(s) affected	0.218 sec
35	01:00:53	call get_min_salary()	1 row(s) returned	0.047 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Activate Windows
Go to Settings to activate Windows

MySQL Workbench

login by Dhanish

File Edit View Query Database Server Tools Scripting Help

Navigator: 20bcs040_assignment (SQL scrip... 20bcs040_assignment (SQL scr... SQL File 5* 20bcs040_assignment-06* SQL File

SCHEMAS

Filter objects

hospitaldb
railway
sys

Administration Schemas

Information

No object selected

161 create procedure get_max_salary()
162 begin
163 select max(salary) from employee;
164 end;
165
166 call get_max_salary();

Result Grid

max(salary)
780000.00

Result 11

Output

Action Output

#	Time	Action	Message	Duration / Fetch
35	01:00:53	call get_min_salary()	1 row(s) returned	0.047 sec / 0.000 sec
36	01:02:17	call get_max_salary()	Error Code: 1305. PROCEDURE mysql.get_max_salary does not exist	0.000 sec
37	01:02:26	create procedure get_max_salary() begin select max(salary) from employee; end;	0 row(s) affected	0.109 sec
38	01:02:30	call get_max_salary()	1 row(s) returned	0.000 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

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