

STORED PROCEDURES

The screenshot shows a SQL script editor with the following code:

```
6      FirstName CHAR(25) NOT NULL,  
7      LastName CHAR(25) NOT NULL,  
8      Salary INT(15) NOT NULL,  
9      JoiningDate DATETIME NOT NULL,  
10     Department CHAR(25) NOT NULL  
11 );  
12 • DESCRIBE Worker;
```

Below the editor, the 'Result Grid' displays the table structure for 'Worker':

Field	Type	Null	Key	Default	Extra
Worker_Id	int	NO	PRI		
FirstName	char(25)	NO			
LastName	char(25)	NO			
Salary	int	NO			
JoiningDate	datetime	NO			
Department	char(25)	NO			

The 'Output' pane shows the execution results:

#	Time	Action	Message	Duration / F
1	22:02:36	CREATE TABLE Worker (Worker_Id INT PRIMARY KEY, FirstName CHAR(25) NOT NULL, LastName C...	0 row(s) affected. 1 warning(s): 1681 Integer display width is deprecated and will be removed in a future release.	0.015 sec
2	22:02:53	CREATE TABLE Worker (Worker_Id INT PRIMARY KEY, FirstName CHAR(25) NOT NULL, LastName C...	Error Code: 1050. Table 'worker' already exists	0.000 sec
3	22:07:02	DESCRIBE Worker	6 row(s) returned	0.000 sec /

2.

The screenshot shows a SQL script editor with the following code:

```
46 END //  
47  
48 DELIMITER ;  
49 • #-- Call the procedure  
50 SET @worker_salary = 0;  
51 • CALL GetSalaryByWorkerId(1, @worker_salary);  
52 • SELECT @worker_salary AS Salary;  
--
```

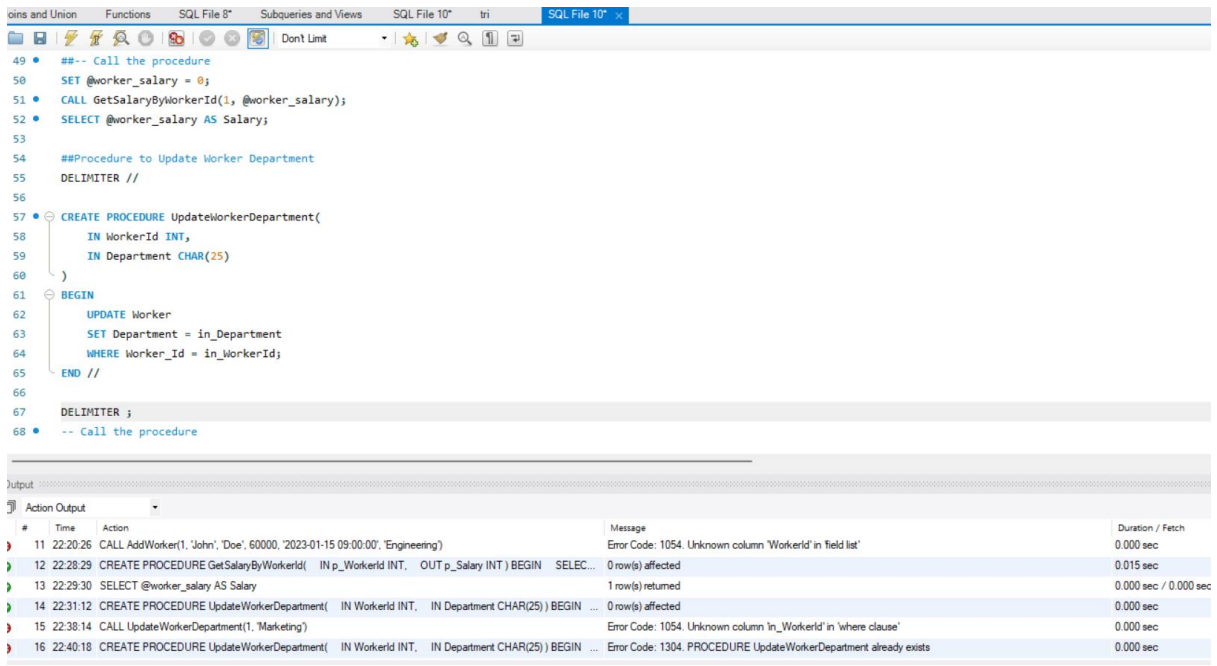
Below the editor, the 'Result Grid' displays the output of the stored procedure call:

Field	Type	Null	Key	Default	Extra
Salary	int	NO			

The 'Output' pane shows the execution results:

#	Time	Action	Message	Duration / F
8	22:18:49	CALL AddWorker(1, 'Archana', 'Divya', '70000', '2024-01-12 09:00:00', 'Engineering')	Error Code: 1054. Unknown column 'WorkerId' in field list	0.0
9	22:19:27	CREATE PROCEDURE AddWorker(IN Worker_Id INT, IN FirstName CHAR(25), IN LastName CHAR(25), IN Salary INT, IN JoiningDate DATETIME, IN Department CHAR(25)) BEGIN INSERT INTO Worker (Worker_Id, FirstName, LastName, Salary, JoiningDate, Department) VALUES (Worker_Id, FirstName, LastName, Salary, JoiningDate, Department); END	Error Code: 1304. PROCEDURE AddWorker already exists	0.0
10	22:19:44	CALL AddWorker(1, 'Archana', 'Divya', '70000', '2024-01-12 09:00:00', 'Engineering')	Error Code: 1054. Unknown column 'WorkerId' in field list	0.0
11	22:20:26	CALL AddWorker(1, 'John', 'Doe', '60000', '2023-01-15 09:00:00', 'Engineering')	Error Code: 1054. Unknown column 'WorkerId' in field list	0.0
12	22:28:29	CREATE PROCEDURE GetSalaryByWorkerId(IN p_WorkerId INT, OUT p_Salary INT) BEGIN SELECT @worker_salary AS Salary; END	0 row(s) affected	0.0
13	22:29:30	SELECT @worker_salary AS Salary	1 row(s) returned	0.0

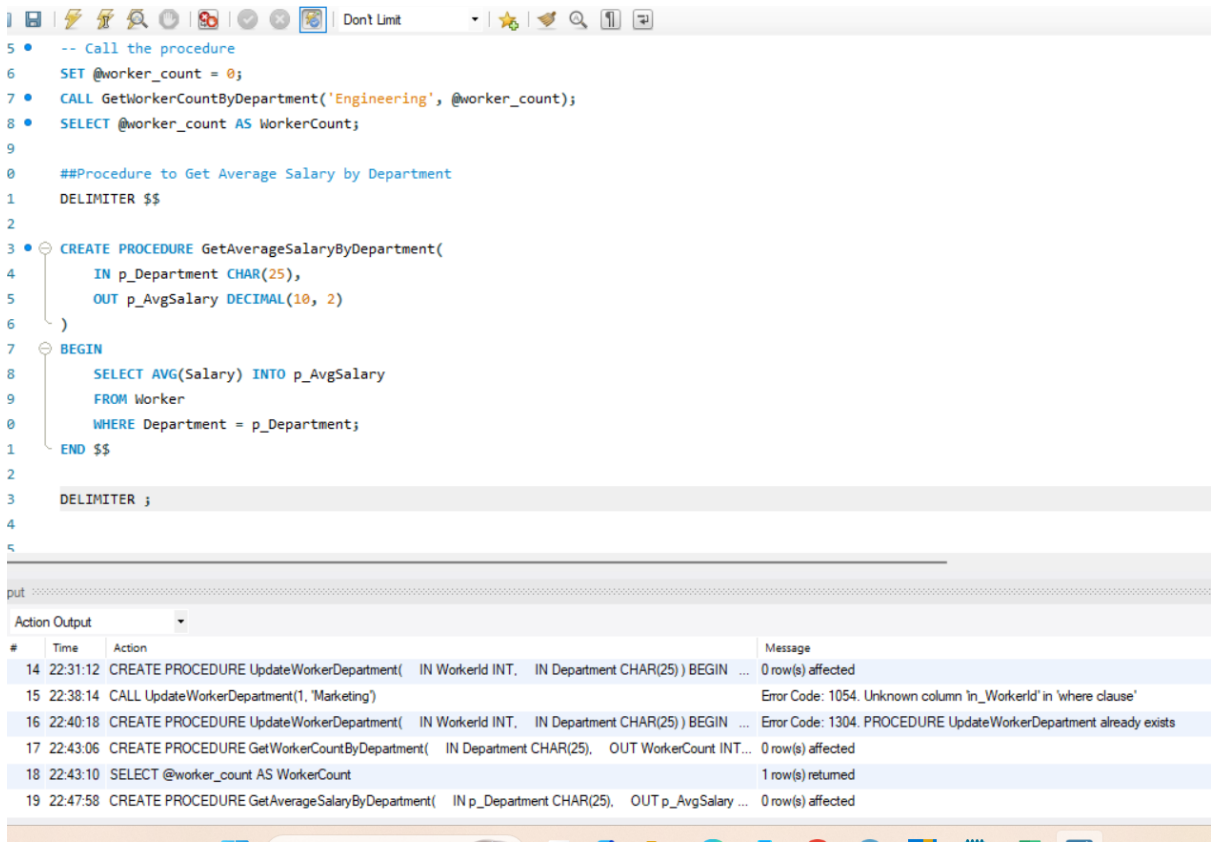
3.



The screenshot shows a SQL script in SQL Server Enterprise Manager. The script contains several errors related to column names and procedure existence. The output window shows the following messages:

#	Time	Action	Message	Duration / Fetch
11	22:20:26	CALL AddWorker(1, 'John', 'Doe', 60000, '2023-01-15 09:00:00', 'Engineering')	Error Code: 1054. Unknown column 'WorkerId' in field list	0.000 sec
12	22:28:29	CREATE PROCEDURE GetSalaryByWorkerId(IN p_WorkerId INT, OUT p_Salary INT) BEGIN SELECT	0 row(s) affected	0.015 sec
13	22:29:30	SELECT @worker_salary AS Salary	1 row(s) returned	0.000 sec / 0.000 sec
14	22:31:12	CREATE PROCEDURE UpdateWorkerDepartment(IN WorkerId INT, IN Department CHAR(25)) BEGIN	0 row(s) affected	0.000 sec
15	22:38:14	CALL UpdateWorkerDepartment(1, 'Marketing')	Error Code: 1054. Unknown column 'In_WorkerId' in 'where clause'	0.000 sec
16	22:40:18	CREATE PROCEDURE UpdateWorkerDepartment(IN WorkerId INT, IN Department CHAR(25)) BEGIN	Error Code: 1304. PROCEDURE UpdateWorkerDepartment already exists	0.000 sec

4.



The screenshot shows a SQL script in SQL Server Enterprise Manager. The script contains several errors related to column names and procedure existence. The output window shows the following messages:

#	Time	Action	Message
14	22:31:12	CREATE PROCEDURE UpdateWorkerDepartment(IN WorkerId INT, IN Department CHAR(25)) BEGIN	0 row(s) affected
15	22:38:14	CALL UpdateWorkerDepartment(1, 'Marketing')	Error Code: 1054. Unknown column 'In_WorkerId' in 'where clause'
16	22:40:18	CREATE PROCEDURE UpdateWorkerDepartment(IN WorkerId INT, IN Department CHAR(25)) BEGIN	Error Code: 1304. PROCEDURE UpdateWorkerDepartment already exists
17	22:43:06	CREATE PROCEDURE GetWorkerCountByDepartment(IN Department CHAR(25), OUT WorkerCount INT...	0 row(s) affected
18	22:43:10	SELECT @worker_count AS WorkerCount	1 row(s) returned
19	22:47:58	CREATE PROCEDURE GetAverageSalaryByDepartment(IN p_Department CHAR(25), OUT p_AvgSalary	0 row(s) affected

5.

```

85 • -- Call the procedure
86 SET @worker_count = 0;
87 • CALL GetWorkerCountByDepartment('Engineering', @worker_count);
88 • SELECT @worker_count AS WorkerCount;
89
90 ##Procedure to Get Average Salary by Department
91 DELIMITER $$
92
93 • CREATE PROCEDURE GetAverageSalaryByDepartment(
94     IN Department CHAR(25),
95     OUT AvgSalary DECIMAL(10, 2)
96 )
97 BEGIN
98     SELECT AVG(Salary) INTO AvgSalary
99     FROM Worker
100     WHERE Department = Department;
101 END $$
102
103 DELIMITER ;
104
105

```

Output

#	Time	Action	Message
14	22:31:12	CREATE PROCEDURE UpdateWorkerDepartment(IN WorkerId INT, IN Department CHAR(25)) BEGIN ...	0 row(s) affected
15	22:38:14	CALL UpdateWorkerDepartment(1, 'Marketing')	Error Code: 1054. Unknown column 'in
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19	22:47:58	CREATE PROCEDURE GetAverageSalaryByDepartment(IN p_Department CHAR(25), OUT p_AvgSalary ...	0 row(s) affected

SUMMARY

This project implements a simple Worker Management System using SQL. It includes the creation of a Worker table and several stored procedures to manage worker records, including adding workers, retrieving salaries, updating departments, counting workers in a department, and calculating average salaries.