

Muhammad Kaleem

56614

BS – DS 4-1

Q1:

Query 1:

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'Schemas' tree with 'university' expanded, showing 'Tables' and 'Columns'. The central pane shows the SQL script for Query 1:

```
1
2 • create database university;
3
4 • use university;
5
6 • create table students(
7   Sap_id int primary key,
8   First_Name varchar(40) not null,
9   Last_Name varchar(30) not null,
10  Department_Id int not null,
11  Department_Name varchar(20) not null
12 );
13
14 • insert into students (Sap_id,First_Name,Last_Name,Department_Id,Department_Name)
15   values (56614,'Muhammad','Kaleem',1100,'Data Science');
16
17 • select * from students;
```

The 'Result Grid' shows the output of the query:

Sap_id	First_Name	Last_Name	Department_...	Department_Na...
56614	Muhammad	Kaleem	1100	Data Science

The 'Action Output' pane shows the execution details:

Time	Action	Response	Duration / Fetch Time
08:45:09	create table students(Sap_id int primary key, First_Name varchar(40) not null, Last_Name varchar(30) not null, Department_Id int...	0 row(s) affected	0.011 sec
08:52:25	insert into students (Sap_id,First_Name,Last_Name,Department_Id,Department_Name) values (56614,'Muhammad','Kaleem',1100...	1 row(s) affected	0.0083 sec
08:52:42	select * from students LIMIT 0, 1000	1 row(s) returned	0.00059 sec / 0.000...

Query Completed

Query 2:

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'Schemas' tree with 'university' expanded, showing 'Tables' and 'Columns'. The central pane shows the SQL script for Query 2:

```
7
8 Sap_id int primary key,
9 First_Name varchar(40) not null,
10 Last_Name varchar(30) not null,
11 Department_Id int not null,
12 Department_Name varchar(20) not null
13 );
14 • insert into students (Sap_id,First_Name,Last_Name,Department_Id,Department_Name)
15   values (56614,'Muhammad','Kaleem',1100,'Data Science' );
16
17 • select * from students;
18
19
20 • create table Faculty(
21   Id int primary key,
22   First_Name varchar(40) ,
23   Last_Name varchar(30) ,
24   Subject_Name varchar(20)
25 );
26 • insert into Faculty (Id ,First_Name)
27   values (1,'Sir Mueed' );
28
29 • select * from Faculty;
```

The 'Result Grid' shows the output of the query:

Id	First_Name	Last_Name	Subject_Name
1	Sir Mueed		

The 'Action Output' pane shows the execution details:

Time	Action	Response	Duration / Fetch Time
08:57:32	create table Faculty(Id int primary key, First_Name varchar(40) , Last_Name varchar(30) , Subject_Name varchar(20))	0 row(s) affected	0.0073 sec
08:58:10	insert into Faculty (Id ,First_Name) values (1,'Sir Mueed')	1 row(s) affected	0.0028 sec
08:58:27	select * from Faculty LIMIT 0, 1000	1 row(s) returned	0.00086 sec / 0.000...

Query Completed

Query 3:

Local instance 3306 - Warning - not supported

Administration Schemas Query 1 Limit to 1000 rows

Schemas

- sys
- university
 - Tables
 - students
 - Columns
 - Sap_Id
 - First_Name
 - Last_Name
 - Department_Id
 - Department_N...
 - Indexes
 - Foreign Keys
 - Triggers
 - Views
 - Stored Procedures
 - Functions

```
28
29 • select * from Faculty;
30
31
32
33
34 • create table employees(
35   Id int primary key,
36   First_Name varchar(40) ,
37   Last_Name varchar(30) ,
38   E_mail varchar(20),
39   Hire_Date date
40 );
41
42
43
44 • insert into employees(Id,Last_Name,Hire_Date)
45   values(53530,'Arbaz',SYSDATE());
46
47 • select * from employees;
48
49
50
```

100% 1:48

Result Grid Filter Rows: Search Edit: Export/Import:

Id	First_Name	Last_Name	E_mail	Hire_Date
53530	Arbaz	Arbaz	Arbaz	2025-04-18

employees 3 Apply Revert

Action Output

Time	Action	Response	Duration / Fetch Time
13 09:04:07	insert into employees(Id,Last_Name,Hire_Date) values(53530,'Arbaz',SYSDATE)	Error Code: 1054. Unknown column 'SYSDATE' in 'field'	0.00087 sec
14 09:04:21	insert into employees(Id,Last_Name,Hire_Date) values(53530,'Arbaz',SYSDATE())	1 row(s) affected, 1 warning(s): 1292 Incorrect date v...	0.0030 sec
15 09:05:02	select * from employees LIMIT 0, 1000	1 row(s) returned	0.00092 sec / 0.0000...

Query Completed

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

Query 4

Local instance 3306 - Warning - not supported

Administration Schemas Query 1 Limit to 1000 rows

Schemas

- sys
- university
 - Tables
 - students
 - Columns
 - Sap_Id
 - First_Name
 - Last_Name
 - Department_Id
 - Department_N...
 - Indexes
 - Foreign Keys
 - Triggers
 - Views
 - Stored Procedures
 - Functions

```
34 • create table employees(
35   Id int primary key,
36   First_Name varchar(40) ,
37   Last_Name varchar(30) ,
38   E_mail varchar(20),
39   Hire_Date date
40 );
41
42
43
44 • insert into employees(Id,Last_Name,Hire_Date)
45   values(53530,'Arbaz',SYSDATE());
46
47 • select * from employees;
48
49 • insert into employees(Id,First_Name)
50   values (Id ,First_Name);
51
52 • update students
53   set First_Name = 'Muh'
54   where Sap_Id = 56614;
55
56 • select * from students;
57
```

100% 24:56

Result Grid Filter Rows: Search Edit: Export/Import:

Sap_Id	First_Name	Last_Name	Department_Id	Department_Name
56614	Muh	Kaleem	1100	Data Science

students 5 Apply Revert

Action Output

Time	Action	Response	Duration / Fetch Time
18 09:16:31	update students set First_Name = 'Muh' where id = 56614	Error Code: 1054. Unknown column 'id' in 'where clau...	0.0012 sec
19 09:17:03	update students set First_Name = 'Muh' where Sap_Id = 56614	1 row(s) affected Rows matched: 1 Changed: 1 Warn...	0.0025 sec
20 09:17:20	select * from students LIMIT 0, 1000	1 row(s) returned	0.00080 sec / 0.0000...

Query Completed

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

Query 4:

The screenshot displays the SQL Server Enterprise Manager interface. The left pane shows the 'Schemas' tree with 'university' expanded, showing tables like 'students'. The central pane shows the following SQL script:

```
43
44 insert into employees(Id,Last_Name,Hire_Date)
45 values(53530,'Arbaz',SYSDATE());
46
47 select * from employees;
48
49 insert into employees(Id,First_Name)
50 values (Id ,First_Name);
51
52 update students
53 set First_Name = 'Muh'
54 where Sap_Id = 56614;
55
56 select * from students;
57
58 insert into students (Sap_Id ,First_Name,Last_Name,Department_Id,Department_Name)
59 values (53098,'Muhammad','Israr',100,' computer'),
60 (56626,'Husnain','Haider',101,' computer');
61
62 Delete from students where Sap_Id = 56614;
63
64 select * from students;
65
```

The 'Result Grid' shows the output of the queries:

Sap_Id	First_Name	Last_Name	Department_Id	Department_Name
53098	Muhammad	Israr	100	computer
56626	Husnain	Haider	101	computer

The 'Action Output' pane shows the execution log:

Time	Action	Response	Duration / Fetch Time
29 09:30:47	DELETE s FROM students s JOIN students sub ON s.Last_Name = sub.Last_Name WHERE sub.Last_Name LIKE 'y%'	Error Code: 1175. You are using safe update mode an...	0.0011 sec
30 09:31:48	Delete from students where Sap_Id = 56614	1 row(s) affected	0.0031 sec
31 09:32:04	select * from students LIMIT 0, 1000	2 row(s) returned	0.00086 sec / 0.000...

Query Completed

Q3:

Part 3:

The screenshot displays the SQL Server Enterprise Manager interface. The left pane shows the 'Schemas' tree with 'university' expanded, showing tables like 'students'. The central pane shows the following SQL script:

```
77 Course_Id int primary key,
78 Course_Name varchar(30) ,
79 Teacher_Name varchar(20),
80 Sap_Id int,
81 Teacher_Id int unique ,
82 FOREIGN KEY (Sap_Id) REFERENCES students(Sap_Id)
83
84
85
86
87 create table students(
88 Sap_Id int primary key,
89 First_Name varchar(40) ,
90 Last_Name varchar(30) ,
91 Course_Id int ,
92 Department_Id int unique key,
93 Department_Name varchar(20) ,
94 FOREIGN KEY (Course_Id) REFERENCES course(Course_Id)
95
96
97
98 DESC students;
99
```

The 'Result Grid' shows the output of the queries:

Field	Type	Null	Key	Default	Extra
Sap_Id	int	NO	PK		
First_Name	varchar(40)	YES			
Last_Name	varchar(30)	YES			
Course_Id	int	YES	MUL		
Department_Id	int	YES	UNI		
Department_Name	varchar(20)	YES			

The 'Action Output' pane shows the execution log:

Time	Action	Response	Duration / Fetch Time
40 09:47:17	create table course(Course_Id int primary key, Course_Name varchar(30) , Teacher_Name varchar(20), Sap_Id int, Teacher_Id int...	Error Code: 1050. Table 'course' already exists	0.0017 sec
41 09:47:25	create table students(Sap_Id int primary key, First_Name varchar(40) , Last_Name varchar(30) , Course_Id int , Department_Id int...	0 row(s) affected	0.011 sec
42 09:47:32	DESC students	6 row(s) returned	0.0028 sec / 0.00002...

Query Completed

Part 2:

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'SCHEMAS' tree with 'sys' and 'university' folders. The 'university' folder is expanded, showing 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The central query window contains the following SQL code:

```
91 Course_Id int ,
92 Department_Id int unique key,
93 Department_Name varchar(20) ,
94 FOREIGN KEY (Course_Id) REFERENCES course(Course_Id)
95 );
96
97
98 • DESC students;
99
100 • DROP TABLE students;
101
102 • Drop table course;
103
104
105 • create table students(
106 Sap_id int primary key,
107 First_Name varchar(40) ,
108 Last_Name varchar(30) ,
109 Department_Id int unique key,
110 Department_Name varchar(20)
111 );
112
113 • DESC course;
```

The 'Results' pane at the bottom shows the 'Result Grid' with the following columns: Field, Type, Null, Key, Default, Extra. The data is as follows:

Field	Type	Null	Key	Default	Extra
Course_Id	int	NO	PRI		
Course_Name	varchar(30)	YES			
Teacher_Name	varchar(20)	YES			
Sap_id	int	YES	MUL		
Teacher_Id	int	YES	UNI		

The 'Action Output' pane at the bottom shows the execution results:

Time	Action	Response	Duration / Fetch Time
48 09:51:04	create table students(Sap_id int primary key, First_Name varchar(40) , Last_Name varchar(30) , Department_Id int unique key, D...	0 row(s) affected	0.0087 sec
49 09:51:20	create table course(Course_Id int primary key, Course_Name varchar(30) , Teacher_Name varchar(20) , Sap_id int, Teacher_Id int...	0 row(s) affected	0.0093 sec
50 09:51:41	DESC course	9 row(s) returned	0.0029 sec / 0.00001...

Query Completed

Q4:

Insert student info:

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'SCHEMAS' tree with 'sys' and 'university' folders. The 'university' folder is expanded, showing 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The central query window contains the following SQL code:

```
94 FOREIGN KEY (Course_Id) REFERENCES course(Course_Id)
95 );
96
97
98 • DESC students;
99
100 • DROP TABLE students;
101
102 • Drop table course;
103
104
105 • create table students(
106 Sap_id int primary key,
107 First_Name varchar(40) ,
108 Last_Name varchar(30) ,
109 Department_Id int unique key,
110 Department_Name varchar(20)
111 );
112
113 • insert into students (Sap_id ,First_Name,Last_Name,Department_Id,Departent_Name)
114 values (56614,'Muhammad','Kaleem',1100,'Data Science');
115
116 • select * from students;
```

The 'Results' pane at the bottom shows the 'Result Grid' with the following columns: Sap_id, First_Name, Last_Name, Department_..., Department_Na... The data is as follows:

Sap_id	First_Name	Last_Name	Department_...	Department_Na...
56614	Muhammad	Kaleem	1100	Data Science

The 'Action Output' pane at the bottom shows the execution results:

Time	Action	Response	Duration / Fetch Time
50 09:51:41	DESC course	9 row(s) returned	0.0029 sec / 0.00001...
51 09:54:49	insert into students (Sap_id ,First_Name,Last_Name,Department_Id,Departent_Name) values (56614,'Muhammad','Kaleem',1100...	1 row(s) affected	0.0048 sec
52 09:55:12	select * from students LIMIT 0, 1000	1 row(s) returned	0.0011 sec / 0.00007...

Query Completed

Update student info:

Local Instance 3306 - Warning - not supported

AdministrationSchemasQuery 1

Context HelpSnippets

SCHEMAS

Filter objects

sys

university

Tables

Views

Stored Procedures

Functions

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

Drop table course;

create table students(
Sap_id int primary key,
First_Name varchar(40) ,
Last_Name varchar(30) ,
Department_Id int unique key,
Department_Name varchar(20)
);

insert into students (Sap_id,First_Name,Last_Name,Department_Id,Department_Name)
values (56614,'Muhammad','Kaleem',1100,'Data Science');

update students
set First_Name = 'Junior'
where Sap_id = 56614;

select * from students;

100%

1:121

Result Grid

Filter Rows: Search

Edit: Export/Import:

Sap_id First_Name Last_Name Department_... Department_Na...

56614 Junior Kaleem 1100 Data Science

students 10

Apply Revert

Action Output

Time Action Response Duration / Fetch Time

52 09:55:12 select * from students LIMIT 0, 1000 1 row(s) returned 0.0011 sec / 0.00007...

53 09:58:19 update students set First_Name = 'Junior' where Sap_Id = 56614 1 row(s) affected Rows matched: 1 Changed: 1 Warn... 0.0033 sec

54 09:58:33 select * from students LIMIT 0, 1000 1 row(s) returned 0.00087 sec / 0.0000...

Query Completed

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