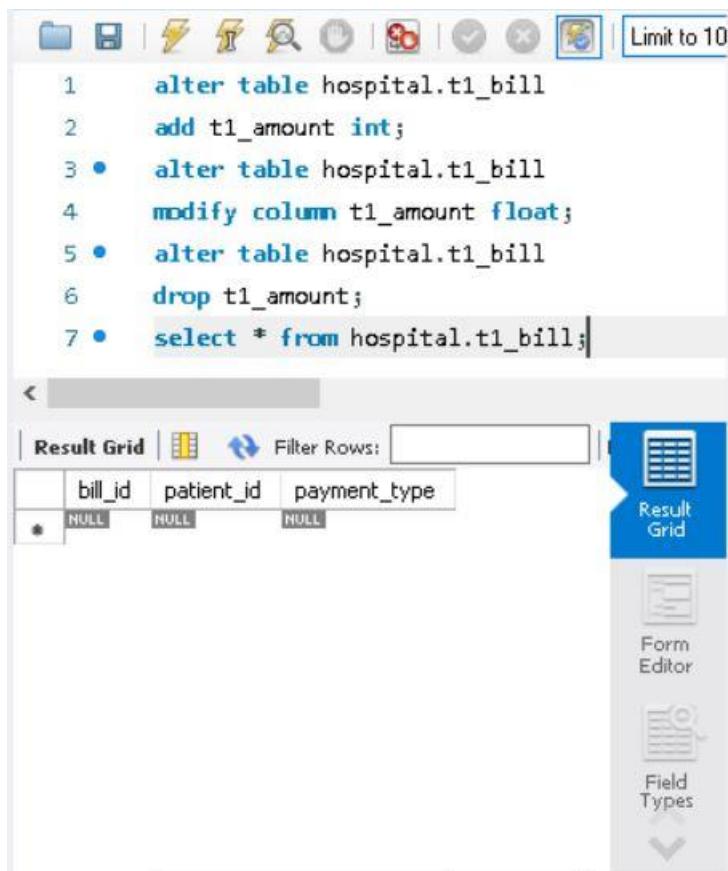


```
1). alter table hospital.t1_bill  
add t1_amount int;  
  
alter table hospital.t1_bill  
modify column t1_amount float;  
  
alter table hospital.t1_bill  
drop t1_amount;  
  
select * from hospital.t1_bill;
```



The screenshot shows the MySQL Workbench interface. At the top, there is a toolbar with various icons. Below the toolbar, a code editor window displays the seven SQL statements listed above. The statements are numbered 1 through 7. Statements 1, 2, and 7 are standard SQL, while statements 3, 4, 5, and 6 are preceded by a blue circular bullet point, indicating they are part of a transaction. Statement 7 is currently being executed, as indicated by the cursor position. Below the code editor is a results pane titled "Result Grid". It contains a table with three columns: "bill\_id", "patient\_id", and "payment\_type". A single row is shown with all values set to "NULL". To the right of the results pane is a vertical toolbar with three items: "Result Grid" (which is selected and highlighted in blue), "Form Editor", and "Field Types".

	bill_id	patient_id	payment_type
*	NULL	NULL	NULL

```
2). insert into hospital.t1_nurse(nurse_id, assigned_patient_id,  
assigned_room_id)  
  
values(1, 1, 1);  
  
insert into hospital.t1_nurse(nurse_id, assigned_patient_id,  
assigned_room_id)  
  
values(2, 2, 2);
```

```
insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(3, 3, 3);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(4, 4, 4);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(5, 5, 5);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(6, 6, 6);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(7, 7, 7);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(8, 8, 8);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(9, 9, 9);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(10, 10, 10);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
values(11, 11, 11);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)
```

```
values(12, 12, 12);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(13, 13, 13);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(14, 14, 14);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(15, 15, 15);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(16, 16, 16);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(17, 17, 17);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(18, 18, 18);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(19, 19, 19);

insert into hospital.t1_nurse(nurse_id, assigned_patient_id,
assigned_room_id)

values(20, 20, 20);

select * from hospital.t1_nurse
```

Result Grid | Filter Rows:  Edit: Export/Import: Wrap Cell Content

	nurse_id	assigned_patient_id	assigned_room_id
▶	1	1	1
	2	2	2
	3	3	3
	4	4	4
	5	5	5
	6	6	6
	7	7	7
	8	8	8
	9	9	9
	10	10	10
	11	11	11
	12	12	12
	13	13	13
	14	14	14
	15	15	15
	16	16	16
	17	17	17
	18	18	18
	19	19	19
	20	20	20
*	NULL	NULL	NULL

t1\_nurse 2 × Apply Revert

3). insert into hospital.t1\_bill(bill\_id, patient\_id, payment\_type)  
values(2, 1, 'cash');

✖ 28 15:45:16 insert into hospital.t1\_bill(bill\_id, patient\_id, payment\_type) values(1, 2, 'ca... Error Code: 1062. Duplicate entry '1' for key 't1\_bill.PRIMARY' 0.000 sec

insert into hospital.t1\_bill(bill\_id, patient\_id, payment\_type)  
values(1, 1, 'cash');

✖ 36 15:55:30 insert into hospital.t1\_bill(bill\_id, patient\_id, payment\_type) values(1, 1, 'ca... Error Code: 1062. Duplicate entry '1' for key 't1\_bill.idx\_t1\_bill\_patient\_id' 0.000 sec

insert into hospital.t1\_bill  
values(1, null, 'card');

✖ 41 16:01:03 insert into hospital.t1\_bill values(1, null, 'card') Error Code: 1048. Column 'patient\_id' cannot be null 0.000 sec

alter table hospital.t1\_bill  
add t1\_amount int default 10000;  
insert into t1\_bill  
values(4, 3, 'cash', 100);

	46 16:09:01 insert into t1_bill values(4, 3, 'cash', 100)	1 row(s) affected	0.000 sec
--	-----------------------------------------------------------	-------------------	-----------

4).

```

1 •  insert into hospital.t1_bill
2   values(1, 2, 'cash', 10000);
3
4
5 ✘ Response: Error Code: 1452. Cannot add or update a child row: a foreign key
6   constraint fails ('hospital'.`t1_bill`, CONSTRAINT `patient_id` FOREIGN KEY
7   (`patient_id`) REFERENCES `t1_patient` (`patient_id`))
8

```

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

Output			
Action Output	#	Time	Action
	56	16:29:30	Apply changes to t1_bill
	57	16:29:36	Apply changes to t1_bill
	58	16:29:42	Apply changes to t1_bill
	59	16:30:05	SELECT * FROM hospital.t1_bill LIMIT 0, 1000
	60	16:30:17	Apply changes to t1_bill
	61	16:30:52	insert into hospital.t1_bill values(1, 2, 'cash', 10000)

Message	Duration / Fetch
No changes detected	
No changes detected	
Error 1452: Cannot add or update a child row: a foreign key constraint fail...	
4 row(s) returned	0.000 sec / 0.000 sec
Changes applied	
Error Code: 1452: Cannot add or update a child row: a foreign key const...	0.000 sec

5).

The screenshot shows the MySQL Workbench interface. In the SQL editor, a delete statement is being run:

```
1  delete from hospital.t1_patient
2  where patient_id = 1;
3
4  response: Error Code: 1451. Cannot delete or update a parent row: a
5  foreign key constraint fails ('hospital'.`t1_bill`, CONSTRAINT `patient_id`
6  FOREIGN KEY (`patient_id`) REFERENCES `t1_patient` (`patient_id`))
7
```

An error message is displayed: "response: Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails ('hospital'.`t1\_bill`, CONSTRAINT `patient\_id` FOREIGN KEY (`patient\_id`) REFERENCES `t1\_patient` (`patient\_id`))".

In the Output pane, the log shows the following actions:

#	Time	Action	Message	Duration / Fetch
59	16:30:05	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
60	16:30:17	Apply changes to t1_bill	Changes applied	
61	16:30:52	insert into hospital.t1_bill values(1, 2, 'cash', 10000)	Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails ('hospital'.`t1_bill`, CONSTRAINT `patient_id` FOREIGN KEY (`patient_id`) REFERENCES `t1_patient` (`patient_id`))	0.000 sec
62	16:35:32	insert into t1_patient values(1, 'sanchit', '9873849394', 'sanchit', 'sanchit', ...)	1 row(s) affected	0.000 sec
63	16:35:43	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
64	16:36:44	delete from hospital.t1_patient where patient_id = 1	Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails ('hospital'.`t1_bill`, CONSTRAINT `patient_id` FOREIGN KEY (`patient_id`) REFERENCES `t1_patient` (`patient_id`))	0.015 sec

6).

The screenshot shows the MySQL Workbench interface. In the SQL editor, an update statement is being run:

```
1  update hospital.t1_bill
2  set t1_amount = 1000
3  where patient_id = 1;
```

An error message is displayed: "Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails ('hospital'.`t1\_bill`, CONSTRAINT `patient\_id` FOREIGN KEY (`patient\_id`) REFERENCES `t1\_patient` (`patient\_id`))".

In the Output pane, the log shows the following actions:

#	Time	Action	Message	Duration / Fetch
60	16:30:17	Apply changes to t1_bill	Changes applied	
61	16:30:52	insert into hospital.t1_bill values(1, 2, 'cash', 10000)	Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails ('hospital'.`t1_bill`, CONSTRAINT `patient_id` FOREIGN KEY (`patient_id`) REFERENCES `t1_patient` (`patient_id`))	0.000 sec
62	16:35:32	insert into t1_patient values(1, 'sanchit', '9873849394', 'sanchit', 'sanchit', ...)	1 row(s) affected	0.000 sec
63	16:35:43	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
64	16:36:44	delete from hospital.t1_patient where patient_id = 1	Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails ('hospital'.`t1_bill`, CONSTRAINT `patient_id` FOREIGN KEY (`patient_id`) REFERENCES `t1_patient` (`patient_id`))	0.015 sec
65	16:38:30	update hospital.t1_bill set t1_amount = 1000 where patient_id = 1	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.015 sec

No error

7).

The screenshot shows the MySQL Workbench interface. In the top-left pane, a SQL editor window titled 't1\_bill' contains the following code:

```
1 alter table hospital.t1_bill
2 add t1_amount int default 10000;
3
4 • insert into hospital.t1_bill(bill_id, patient_id, payment_type)
5 values(7,1,'card');
```

In the top-right pane, there is a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

Below the SQL editor, a results grid displays the data inserted into the table:

bill_id	patient_id	payment_type	t1_amount
7	1	card	10000
HULL	HULL	HULL	HULL

At the bottom of the interface, the 'ti\_bill 1' tab is active, showing the following log output:

Action Output	Time	Action	Message	Duration / Fetch
81	16:45:15	alter table hospital.t1_bill add t1_amount int default 10000	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec
82	16:45:15	insert into hospital.t1_bill(bill_id, patient_id, payment_type) values(7,1,'card')	1 row(s) affected	0.016 sec
83	16:45:20	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
84	16:45:20	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
85	16:45:32	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec
86	16:45:49	SELECT * FROM hospital.t1_bill LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

8). select patient\_id from hospital.t1\_bill

where bill\_id = 7;

select patient\_id from hospital.t1\_bill

where t1\_amount = 10000;

select patient\_id from hospital.t1\_bill

where payment\_type = 'card';

select \* from hospital.t1\_bill;

select \* from hospital.t1\_bill

limit 2;

Result Grid | Filter Rows:  Export: Wrap Cell Content:

t1\_bill 2 x Read Only

patient_id
1

Result Grid | Filter Rows:  Export: Wrap Cell Content:

t1\_bill 2 x Read Only

patient_id
1

Result Grid | Filter Rows:  Export: Wrap Cell Content:

t1\_bill 2 x Read Only

patient_id
1

Result Grid | Filter Rows:  Edit: Export/Import: Wrap Cell Content:

t1\_bill 5 x Apply Revert

bill_id	patient_id	payment_type	t1_amount
7	1	card	10000
NULL	NULL	NULL	NULL

Result Grid | Filter Rows:  Edit: Export/Import: Wrap Cell Content

	bill_id	patient_id	payment_type	t1_amount
▶	7	1	card	10000
*	NULL	NULL	NULL	NULL

t1\_bill 5 x Apply Revert

9).

t1\_bill x SQL Additions

```

1 • update hospital.t1_bill
2   set patient_id = 4
3   where t1_amount = 10000;
4
5 ✘ response: Error Code: 1175. You are using safe update mode and you tried
6   to update a table without a WHERE that uses a KEY column.
7   To disable safe mode, toggle the option in Preferences -> SQL Editor and reconnect.
8
9

```

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

Output Context Help Snippets

#	Time	Action	Message	Duration / Fetch
93	16:51:44	select patient_id from hospital.t1_bill where payment_type = 'card' LIMIT ...	1 row(s) returned	0.000 sec / 0.000 sec
94	16:51:52	select * from hospital.t1_bill LIMIT 0,1000	1 row(s) returned	0.000 sec / 0.000 sec
95	16:52:18	select * from hospital.t1_bill limit 2	1 row(s) returned	0.000 sec / 0.000 sec
96	16:53:32	update hospital.t1_bill set patient_id = 4 where t1_amount = 10000	Error Code: 1175. You are using safe update mode and you tried to updat...	0.063 sec
97	16:54:51	update hospital.t1_bill set patient_id = 4 where t1_amount = 10000	Error Code: 1175. You are using safe update mode and you tried to updat...	0.000 sec
98	16:55:05	SELECT * FROM hospital.t1_patient LIMIT 0,1000	1 row(s) returned	0.000 sec / 0.000 sec