

```
DROP TABLE IF EXISTS student;
CREATE TABLE student
(
    id serial PRIMARY KEY,
    first_name character varying,
    last_name character varying,
    email character varying,
    gender character varying,
    work_phone character varying,
    book_preference_hardcopy boolean
);
```

The screenshot shows a PostgreSQL query editor with a light blue background. The top bar has tabs for 'Query', 'Query History', and 'Scratch Pad'. The 'Query' tab is active, displaying a SQL script with line numbers 1 through 14. The script includes a 'DROP TABLE IF EXISTS' statement, a 'CREATE TABLE' statement for a table named 'student' with various columns, and a 'COPY' statement. The 'Messages' tab is selected at the bottom, showing the execution results. The results indicate that the 'CREATE TABLE' statement was successful and took 162 milliseconds to execute.

```
1 DROP TABLE IF EXISTS student;
2 CREATE TABLE student
3 (
4     id serial PRIMARY KEY,
5     first_name character varying,
6     last_name character varying,
7     email character varying,
8     gender character varying,
9     work_phone character varying,
10    book_preference_hardcopy boolean
11 );
12
13 copy student(first_name,last_name,email,gender,work_phone,book_preference_h
14 --set the path for file location of student_data.csv
```

CREATE TABLE

Query returned successfully in 162 msec.

```
copy student(first_name,last_name,email,gender,work_phone,book_preference_hardcopy)
--set the path for file location of student_data.csv
from '/Applications/PostgreSQL 14/student_data.csv'
delimiter ',' CSV header;
```

```
Query  Query History  Scratch Pad x
7      email character varying,
8      gender character varying,
9      work_phone character varying,
10     book_preference_hardcopy boolean
11 );
12
13 copy student(first_name,last_name,email,gender,work_phone,book_preference_h
14 --set the path for file location of student_data.csv
15 from '/Applications/PostgreSQL 14/student_data.csv'
16 delimiter ',' CSV header;
17
18
19
20 DROP TABLE IF EXISTS student_marks;
21 CREATE TABLE student_marks
22 (
23     id serial PRIMARY KEY,
24     student_reg_id integer,
25     student_id integer,
26     unit2 integer,
27     unit3 integer,
28     unit4 integer,
29     unit5 integer
30 );
31
32 copy student_marks(student_reg_id,student_id,unit2,unit3,unit4,unit5)
33 --set the path for file location of student marks.csv
34 from '/Applications/PostgreSQL 14/student_marks.csv'
35 delimiter ',' CSV header;
```

Data output Messages Notifications

COPY 1000

Query returned successfully in 88 msec.

DROP TABLE IF EXISTS student_marks;

CREATE TABLE student_marks

(

id serial PRIMARY KEY,

student_reg_id integer,

student_id integer,

unit2 integer,

unit3 integer,

unit4 integer,

unit5 integer

);

```
Query  Query History  Scratch Pad x
20     DROP TABLE IF EXISTS student_marks;
21     CREATE TABLE student_marks
22     (
23         id serial PRIMARY KEY,
24         student_reg_id integer,
25         student_id integer,
26         unit2 integer,
27         unit3 integer,
28         unit4 integer,
29         unit5 integer
30     );
31
32     copy student_marks(student_reg_id,student_id,unit2,unit3,unit4,unit5)
33     --set the path for file location of student marks.csv
34     from '/Applications/PostgreSQL 14/student_marks.csv'
35     delimiter ',' CSV header;
```

Data output Messages Notifications

CREATE TABLE

Query returned successfully in 96 msec.

copy student_marks(student_reg_id,student_id,unit2,unit3,unit4,unit5)

```
--set the path for file location of student_marks.csv
from '/Applications/PostgreSQL 14/student_marks.csv'
delimiter ',' CSV header
```

The screenshot shows a PostgreSQL query editor with a 'Query' tab. The query is as follows:

```

27     unit3 integer,
28     unit4 integer,
29     unit5 integer
30 );
31
32 copy student_marks(student_reg_id,student_id,unit2,unit3,unit4,unit5)
33 --set the path for file location of student_marks.csv
34 from '/Applications/PostgreSQL 14/student_marks.csv'
35 delimiter ',' CSV header
36
37
38 Sample questions:
39
40 -- students with the highest marks in Unit 4

```

The 'Messages' tab is active, showing the following output:

```

COPY 1000
Query returned successfully in 107 msec.

```

Sample questions:

```
-- students with the highest marks in Unit 4
select student_id from student_marks where unit4 = 100
```

The screenshot shows a PostgreSQL query editor with a 'Query' tab. The query is as follows:

```

38 Sample questions:
39
40 -- students with the highest marks in Unit 4
41 select student_id from student_marks where unit4 = 100
42 -- students scored between 89 and 100 unit4
43 select student_id from student_marks where unit4 > 89 and unit4 <=100
44 Open ended questions:
45 -- Take a closer look at the tables that you created and come up with 10 di
46 -- Ask your colleagues
47
48 -- students who got 85+ in Unit 2
49 select student_id from student_marks where unit2 >= 85
50
51 -- students who got 85+ in Unit 3

```

The 'Data output' tab is active, showing the results of the query:

	student_id integer
1	31
2	48
3	49
4	109
5	129
6	134
7	153
8	159

Total rows: 43 of 43 Query complete 00:00:00.078 Ln 41, Col 1

-- students scored between 89 and 100 unit4

select student_id from student_marks where unit4 > 89 and unit4 <=100

QueryQuery History

Scratch Pad x

```
38 Sample questions:
39
40 -- students with the highest marks in Unit 4
41 select student_id from student_marks where unit4 = 100
42 -- students scored between 89 and 100 unit4
43 select student_id from student_marks where unit4 > 89 and unit4 <=100
44 Open ended questions:
45 -- Take a closer look at the tables that you created and come up with 10 di
46 -- Ask your colleagues
47
48 -- students who got 85+ in Unit 2
49 select student_id from student_marks where unit2 >= 85
50
51 -- students who got 85+ in Unit 3
```

Data outputMessagesNotifications

+

📄

▼

📋

🗑️

🔍

⬇️

	student_id integer
1	3
2	6
3	7
4	8
5	10
6	11
7	12
8	13

Total rows: 559 of 559Query complete 00:00:00.106Ln 44, Col 1

-- students who got 85+ in Unit 2

select student_id from student_marks where unit2 >= 85

The screenshot shows a SQL IDE interface. The top pane is the 'Query' editor, which contains the following SQL code:

```
43 select student_id from student_marks where unit2 >= 85 and unit4 >= 85
44 Open ended questions:
45 -- Take a closer look at the tables that you created and come up with 10 di
46 -- Ask your colleagues
47
48 -- students who got 85+ in Unit 2
49 select student_id from student_marks where unit2 >= 85
50
51 -- students who got 85+ in Unit 3
52 select student_id from student_marks where unit3 >= 85
53
54 -- students who got 85+ in Unit 4
55 select student_id from student_marks where unit4 >= 85
56
57 -- students who got 85+ in Unit 5
```

The bottom pane is the 'Data output' tab, which displays a table with the following data:

	student_id integer
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

The status bar at the bottom indicates 'Total rows: 1000 of 1000', 'Query complete 00:00:00.107', and 'Ln 50, Col 1'.

-- students who got 85+ in Unit 3
select student_id from student_marks where unit3 >= 85

Query
Query History

Scratch Pad

```

50
51 -- students who got 85+ in Unit 3
52 select student_id from student_marks where unit3 >= 85
53
54 -- students who got 85+ in Unit 4
55 select student_id from student_marks where unit4 >= 85
56
57 -- students who got 85+ in Unit 5
58 select student_id from student_marks where unit5 >= 85
59
60 -- students who got 85+ in at least 2 units
61 select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >=
62
63 -- students who got 85+ in at least 3 units

```

Data output
Messages
Notifications

+

📄

▼

🗑️

🗑️

⬇️

	student_id	integer
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8

Total rows: 1000 of 1000
Query complete 00:00:00.113
Ln 53, Col 1

```

-- students who got 85+ in Unit 4
select student_id from student_marks where unit4 >= 85

```

QueryQuery History

Scratch Pad x

50

-- students who got 85+ in Unit 3

52 select student_id from student_marks where unit3 >= 85

53

54 -- students who got 85+ in Unit 4

55 select student_id from student_marks where unit4 >= 85

56

57 -- students who got 85+ in Unit 5

58 select student_id from student_marks where unit5 >= 85

59

60 -- students who got 85+ in at least 2 units

61 select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >=

62

63 -- students who got 85+ in at least 3 units

Data outputMessagesNotifications

student_id
integer

11

11

3

4

6

7

8

10

11

Total rows: 851 of 851

Query complete 00:00:00.145

Ln 56, Col 1

```
-- students who got 85+ in Unit 5
select student_id from student_marks where unit5 >= 85
```

Query
Query History

Scratch Pad
x

```

50
51 -- students who got 85+ in Unit 3
52 select student_id from student_marks where unit3 >= 85
53
54 -- students who got 85+ in Unit 4
55 select student_id from student_marks where unit4 >= 85
56
57 -- students who got 85+ in Unit 5
58 select student_id from student_marks where unit5 >= 85
59
60 -- students who got 85+ in at least 2 units
61 select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >=
62
63 -- students who got 85+ in at least 3 units

```

Data output
Messages
Notifications

+

📄

▼

📋

🗑️

🗄️

⬇️

	student_id	
	integer	
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8

Total rows: 1000 of 1000
Query complete 00:00:00.115
Ln 59, Col 1

```

-- students who got 85+ in at least 2 units
select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >= 85 and unit4 >=85)
or (unit2 >= 85 and unit5 >=85) or (unit3 >= 85 and unit4 >=85) or (unit3 >= 85 and unit5 >=85)
or (unit4 >= 85 and unit5 >=85)

```


Query
Query History

Scratch Pad
x

```

51 -- students who got 85+ in Unit 3
52 select student_id from student_marks where unit3 >= 85
53
54 -- students who got 85+ in Unit 4
55 select student_id from student_marks where unit4 >= 85
56
57 -- students who got 85+ in Unit 5
58 select student_id from student_marks where unit5 >= 85
59
60 -- students who got 85+ in at least 2 units
61 select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >=
62
63 -- students who got 85+ in at least 3 units
64 select * from student_marks where (unit2 >= 85 and unit3 >=85 and unit4 >=85) or (unit2 >= 85 and unit3 >=85 and unit5 >=85) or (unit2 >= 85 and unit4 >=85 and unit5 >=85)

```

Data output
Messages
Notifications

	id [PK] integer	student_reg_id integer	student_id integer	unit2 integer	unit3 integer	unit4 integer	unit5 integer
1	1	853	1	88	96	87	92
2	2	854	2	86	99	82	95
3	3	855	3	86	95	99	95
4	4	856	4	98	98	89	100
5	5	857	5	100	94	83	95
6	6	858	6	97	91	93	88
7	7	859	7	92	97	97	98
8	8	860	8	86	97	92	88

Total rows: 1000 of 1000
Query complete 00:00:00.162
Ln 62, Col 1

-- students who got 85+ in at least 3 units

```
select * from student_marks where (unit2 >= 85 and unit3 >=85 and unit4 >=85) or (unit2 >= 85 and unit3 >=85 and unit5 >=85) or (unit2 >= 85 and unit4 >=85 and unit5 >=85) or (unit3 >= 85 and unit4 >= 85 and unit5 >=85)
```

Query
Query History

Scratch Pad
x

```

60 -- students who got 85+ in at least 2 units
61 select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >=
62
63 -- students who got 85+ in at least 3 units
64 select * from student_marks where (unit2 >= 85 and unit3 >=85 and unit4 >=8
65
66 --students who got 85+ in all 4 units
67 select student_id from student_marks where (unit2 >= 85 and unit3 >= 85 and
68
69 -- students who got 95+ in Unit 2
70 select student_id from student_marks where unit2 >= 95
71
72 -- students who got 95+ in Unit 3
73 select student_id from student_marks where unit3 >= 95

```

Data output
Messages
Notifications

+

📄

▼

📋

🗑️

🔄

⬇️

	id [PK] integer	student_reg_id integer	student_id integer	unit2 integer	unit3 integer	unit4 integer	unit5 integer
1	1	853	1	88	96	87	92
2	2	854	2	86	99	82	95
3	3	855	3	86	95	99	95
4	4	856	4	98	98	89	100
5	5	857	5	100	94	83	95
6	6	858	6	97	91	93	88
7	7	859	7	92	97	97	98
8	8	860	8	86	97	92	88

Total rows: 1000 of 1000
Query complete 00:00:00.135
Ln 65, Col 1

--students who got 85+ in all 4 units

```
select * from student_marks where (unit2 >= 85 and unit3 >= 85 and unit4 >= 85 and unit5 >= 85)
```

Query

Query History

Scratch Pad X

```

61 select * from student_marks where (unit2 >= 85 and unit3 >=85) or (unit2 >=
62
63 -- students who got 85+ in at least 3 units
64 select * from student_marks where (unit2 >= 85 and unit3 >=85 and unit4 >=8
65
66 --students who got 85+ in all 4 units
67 select * from student_marks where (unit2 >= 85 and unit3 >= 85 and unit4 >=
68
69 -- students who got 95+ in Unit 2
70 select student_id from student_marks where unit2 >= 95
71
72 -- students who got 95+ in Unit 3
73 select student_id from student_marks where unit3 >= 95
74

```

Data output Messages Notifications

+

📄

▼

📋

🗑️

🔄

⬇️

	id [PK] integer	student_reg_id integer	student_id integer	unit2 integer	unit3 integer	unit4 integer	unit5 integer	
1		1	853	1	88	96	87	92
2		3	855	3	86	95	99	95
3		4	856	4	98	98	89	100
4		6	858	6	97	91	93	88
5		7	859	7	92	97	97	98
6		8	860	8	86	97	92	88
7		10	862	10	96	96	96	90
8		11	863	11	85	95	97	99

Total rows: 851 of 851

Query complete 00:00:00.103

Ln 68, Col 1

```

-- students who got 95+ in Unit 2
select student_id from student_marks where unit2 >= 95

```

QueryQuery History

Scratch Pad x

```
64 select * from student_marks where (unit2 >= 85 and unit3 >= 85 and unit4 >= 85)
65
66 --students who got 85+ in all 4 units
67 select * from student_marks where (unit2 >= 85 and unit3 >= 85 and unit4 >= 85)
68
69 -- students who got 95+ in Unit 2
70 select student_id from student_marks where unit2 >= 95
71
72 -- students who got 95+ in Unit 3
73 select student_id from student_marks where unit3 >= 95
74
75 -- students who got 95+ in Unit 4
76 select student_id from student_marks where unit4 >= 95
77
```

Data outputMessagesNotifications

+

📄

▼

📋

🗑️

🗄️

📥

	student_id	integer
1		4
2		5
3		6
4		10
5		13
6		14
7		17
8		18

Total rows: 418 of 418

Query complete 00:00:00.105

Ln 69, Col 1

```
-- students who got 95+ in Unit 3
select student_id from student_marks where unit3 >= 95
```

QueryQuery History

Scratch Pad x

71

-- students who got 95+ in Unit 3

73select student_id from student_marks where unit3 >= 95

74

75-- students who got 95+ in Unit 4

76select student_id from student_marks where unit4 >= 95

77

78-- students who got 95+ in Unit 5

79select student_id from student_marks where unit5 >= 95

80

81-- students who got 95+ in at least 2 units

82select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >=

83

84-- students who got 95+ in at least 3 units

85select * from student_marks where (unit3 >= 95 and unit2 >=95 and unit4 >

Data outputMessagesNotifications

+

📄

▼

📋

🗑️

📦

⬇️

	student_id integer
1	1
2	2
3	3
4	4
5	7
6	8
7	9
8	10

Total rows: 563 of 563

Query complete 00:00:00.103

Ln 72, Col 1

```
-- students who got 95+ in Unit 4
select student_id from student_marks where unit4 >= 95
```

QueryQuery History

Scratch Pad x

75 -- students who got 95+ in Unit 4

76 select student_id from student_marks where unit4 >= 95

77

78 -- students who got 95+ in Unit 5

79 select student_id from student_marks where unit5 >= 95

80

81 -- students who got 95+ in at least 2 units

82 select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >=

83

84 -- students who got 95+ in at least 3 units

85 select * from student_marks where (unit2 >= 95 and unit3 >=95 and unit4 >=9

86

87 --students who got 95+ in all 4 units

88 select * from student_marks where (unit2 >= 95 and unit3 >= 95 and unit4

Data outputMessagesNotifications

+

📄

▼

📋

🗑️

🗄️

📥

	student_id	integer
1		3
2		7
3		10
4		11
5		13
6		17
7		19
8		29

Total rows: 294 of 294

Query complete 00:00:00.136

Ln 76, Col 55

```
-- students who got 95+ in Unit 5
select student_id from student_marks where unit5 >= 95
```

Query
Query History

Scratch Pad

```

75 -- students who got 95+ in Unit 4
76 select student_id from student_marks where unit4 >= 95
77
78 -- students who got 95+ in Unit 5
79 select student_id from student_marks where unit5 >= 95
80
81 -- students who got 95+ in at least 2 units
82 select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >=
83
84 -- students who got 95+ in at least 3 units
85 select * from student_marks where (unit2 >= 95 and unit3 >=95 and unit4 >=9
86
87 --students who got 95+ in all 4 units
88 select * from student_marks where (unit2 >= 95 and unit3 >= 95 and unit4

```

Data output
Messages
Notifications

+

📄

▼

📋

🗑️

🔄

⬇️

	student_id	integer
1		2
2		3
3		4
4		5
5		7
6		9
7		11
8		14

Total rows: 456 of 456
Query complete 00:00:00.101
Ln 79, Col 55

-- students who got 95+ in at least 2 units

```

select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >= 95 and unit4 >=95)
or (unit2 >= 95 and unit5 >=95) or (unit3 >= 95 and unit4 >=95) or (unit3 >= 95 and unit5 >=95)
or (unit4 >= 95 and unit5 >=95)

```

Query
Query History
Scratch Pad

```

75 -- students who got 95+ in Unit 4
76 select student_id from student_marks where unit4 >= 95
77
78 -- students who got 95+ in Unit 5
79 select student_id from student_marks where unit5 >= 95
80
81 -- students who got 95+ in at least 2 units
82 select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >=
83
84 -- students who got 95+ in at least 3 units
85 select * from student_marks where (unit2 >= 95 and unit3 >=95 and unit4 >=9
86
87 --students who got 95+ in all 4 units
88 select * from student_marks where (unit2 >= 95 and unit3 >= 95 and unit4

```

Data output
Messages
Notifications

	id [PK] integer	student_reg_id integer	student_id integer	unit2 integer	unit3 integer	unit4 integer	unit5 integer
1	2	854	2	86	99	82	95
2	3	855	3	86	95	99	95
3	4	856	4	98	98	89	100
4	5	857	5	100	94	83	95
5	7	859	7	92	97	97	98
6	9	861	9	89	97	82	97
7	10	862	10	96	96	96	90
8	11	863	11	85	95	97	99

Total rows: 589 of 589
Query complete 00:00:00.107
Ln 83, Col 1

-- students who got 95+ in at least 3 units

```
select * from student_marks where (unit2 >= 95 and unit3 >=95 and unit4 >=95) or (unit2 >= 95
and unit3 >=95 and unit5 >=95) or (unit2 >= 95 and unit4 >=95 and unit5 >=95) or (unit3 >= 95
and unit4 >= 95 and unit5 >=95)
```


Query

Query History

Scratch Pad

```

76 select student_id from student_marks where unit4 >= 95
77
78 -- students who got 95+ in Unit 5
79 select student_id from student_marks where unit5 >= 95
80
81 -- students who got 95+ in at least 2 units
82 select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >=
83
84 -- students who got 95+ in at least 3 units
85 select * from student_marks where (unit2 >= 95 and unit3 >=95 and unit4 >=9
86
87 --students who got 95+ in all 4 units
88 select * from student_marks where (unit2 >= 95 and unit3 >= 95 and unit4 >=

```

Data output

Messages

Notifications

≡

📄

▼

📋

🗑️

🔄

⬇️

	id [PK] integer	student_reg_id integer	student_id integer	unit2 integer	unit3 integer	unit4 integer	unit5 integer
1	3	855	3	86	95	99	95
2	4	856	4	98	98	89	100
3	7	859	7	92	97	97	98
4	10	862	10	96	96	96	90
5	11	863	11	85	95	97	99
6	14	866	14	100	100	87	100
7	19	871	19	96	99	98	90
8	27	879	27	96	97	94	96

Total rows: 202 of 202

Query complete 00:00:00.137

Ln 84, Col 1

--students who got 95+ in all 4 units

Query

Query History

Scratch Pad x

```

76 select student_id from student_marks where unit4 >= 95
77
78 -- students who got 95+ in Unit 5
79 select student_id from student_marks where unit5 >= 95
80
81 -- students who got 95+ in at least 2 units
82 select * from student_marks where (unit2 >= 95 and unit3 >=95) or (unit2 >=
83
84 -- students who got 95+ in at least 3 units
85 select * from student_marks where (unit2 >= 95 and unit3 >=95 and unit4 >=9
86
87 --students who got 95+ in all 4 units
88 select * from student_marks where (unit2 >= 95 and unit3 >= 95 and unit4 >=

```

Data output

Messages

Notifications

+

📄

▼

📋

🗑️

🗄️

⬇️

	id [PK] integer	student_reg_id integer	student_id integer	unit2 integer	unit3 integer	unit4 integer	unit5 integer
1	35	887	35	99	96	98	100
2	69	921	69	100	96	99	95
3	91	943	91	98	97	99	95
4	109	961	109	96	97	100	100
5	134	986	134	95	100	100	96
6	154	1006	154	99	97	97	98
7	179	1031	179	95	99	99	100
8	188	1040	188	96	95	97	95

Total rows: 30 of 30

Query complete 00:00:00.135

Ln 86, Col 1