

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)
s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the number of students who have passed or failed respectively.

```
Select count(m.s_id) PassFailCount,m.status
from marks m
group by m.status;
```

Affected\_rows: 2

PassFailCount	status
3	fail
7	pass

Question #2 Executable SQL

3 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)

address_city	varchar(20)
email_ID	varchar(20)
school_id	int

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)
s_id	s_name
1	Jack

2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the name of students along with their respective scores city of residence

```

Select s.s_name ,m.score,d.address_city
from student s
inner join
marks m
on s.s_id=m.s_id
inner join
details d
on m.school_id=d.school_id;

```

Affected\_rows: 4

s_name	score	address_city
Jaspreet	100	Banglore
Praveen	88	Hyderabad
Rithvik	97	Delhi
Suraj	95	Banglore

Question #3 Executable SQL
3 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)

address_city	varchar(20)		
email_ID	varchar(20)		
school_id	int		
<b>address_city</b>	<b>email_ID</b>	<b>school_id</b>	<b>accomplishments</b>
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

<b>field</b>	<b>Type</b>		
s_id	int		
school_id	int		
score	int		
status	varchar(20)		
<b>school_id</b>	<b>s_id</b>	<b>score</b>	<b>status</b>
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

<b>field</b>	<b>Type</b>		
s_id	int		
s_name	varchar(20)		
<b>s_id</b>	<b>s_name</b>		
1	Jack		

2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the score of those students who have scored more marks than that of a student with student\_id 6.

```

Select s_id StudentId ,score
from marks
where
score >(select score from marks where s_id=6)

```

Affected\_rows: 2

StudentId	score
2	97
3	100

Question #4 Executable SQL

1 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

  

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected

Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

  

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)

  

s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the email address of those students who have the word "Geek"™ mentioned in their

accomplishments.

```
Select email_Id
from details
where accomplishments Like '%Geek%'
```

Affected\_rows: 2

**email\_Id**

praveen@geeks.com

om@geeks.com

Question #5 Executable SQL

5 Marks

Please Consider the below schemas/tables

mass\_table

field	Type
weight	decimal(10,4)
<b>weight</b>	
5.57	
34.567	
365.253	
34.0	

Write a query to display the output as shown in the sample below.

# weight	kg	gms
# 5.57	5	570
# 34.567	34	567
# 365.253	365	253
# 34	34	0

```
Select weight As '#weight',
floor(weight) as kg,
round((weight - floor(weight))*1000) as gms
```



```
round((weight-FLOOR(weight)/ 1000) as gms
from mass_table;
```

Affected\_rows: 4

#weight	kg	gms
5.57	5	570
34.567	34	567
365.253	365	253
34.0	34	0

Question #6 Executable SQL

2 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)

s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the name and email address of the student who is an 'IMO finalist'.

```

select s.s_name ,m.school_id,d.email_id
from student s
join
marks m
on s.s_id=m.s_id
join
details d
on m.school_id=d.school_id

```

```
on m.school_id=a.school_id
and d.accomplishments='IMO Finalist'
```

Affected\_rows: 1

s_name	school_id	email_id
Suraj	1008	suraj@geeks.com

Question #7 Executable SQL

2 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int

s_id	int
school_id	int
score	int
status	varchar(20)

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)

s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the number of students who reside in Bangalore.

```
Select count(*) noOfStudents,address_city residentCity
from details
Group by address_city
Having address_city='Bangalore'
```

Affected\_rows: 1

noOfStudents	residentCity
2	Banglore

Question #8 Executable SQL

2 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

school_id	s_id	score	status
-----------	------	-------	--------

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)

  

s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the name and status of those students who have a school ID in any of the following -1004, 1012,1016.

```

Select s.s_name Name,m.status PassFail
from student s
join
marks m
on s.s_id=m.s_id
and m.school_id IN('1004','1012','1016')

```

Affected\_rows: 2

Name	PassFail
Jack	fail
Rithvik	pass

Question #9 Executable SQL

2 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hyderabad	praveen@geeks.com	1030	Geek of the month
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass

1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)

  

s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the name and score of the students who have scored marks between 80 and 90.

```
Select s.s_name Name ,m.score
from student s
join
marks m
on s.s_id=m.s_id
and m.score BETWEEN 80 and 90
```

Affected\_rows: 1

Name	score
Praveen	88

Question #10 Executable SQL

3 Marks



Please Consider the below schemas/tables

student2

field	Type
address	varchar(50)
CGPA	decimal(3,1)
course	varchar(20)
roll	int
semester	int
vname	varchar(30)

roll	vname	address	course	semester	CGPA
1	Sai	Bangalore	Programming in C	1	9.5
2	Sri	Mysore	Programming in C	1	6.0
3	Kumar	Bangalore	Data Science	4	8.0
4	Akshay	Bangalore	Data Science	4	9.0
5	Rajesh	Bangalore	Data Science	4	9.0

List the names of the students who have enrolled in more than one course and are from "Bangalore".

```
select count(course),vname from student2
where address='Bangalore'
group by vname
having count(course)>1;
```

Affected\_rows: 2

count(course)	vname
---------------	-------

2	Sai
2	Kumar

Question #11 Executable SQL
2 Marks

Please Consider the below schemas/tables

student2

field	Type
address	varchar(50)
CGPA	decimal(3,1)
course	varchar(20)
roll	int
semester	int
vname	varchar(30)

  

roll	vname	address	course	semester	CGPA
1	Sai	Bangalore	Programming in C	1	9.5
2	Sri	Mysore	Programming in C	1	6.0
3	Kumar	Bangalore	Data Science	4	8.0
4	Akshay	Bangalore	Data Science	4	9.0
5	Rajesh	Bangalore	Data Science	4	9.0

Name the course and the location, where on average, the CGPA is more than 7.5.

```

select course,address,avg(cgpa) AVG_CGPA
from student2
group by course,address
having AVG(CGPA)>7.5

```

Affected\_rows: 3

course	address	AVG_CGPA
Programming in C	Bangalore	9.5
Data Science	Bangalore	8.66667
Big Data	Bangalore	8.0

Question #12 Executable SQL

2 Marks

Please Consider the below schemas/tables

student2

field	Type
address	varchar(50)
CGPA	decimal(3,1)
course	varchar(20)
roll	int
semester	int
vname	varchar(30)

roll	vname	address	course	semester	CGPA
1	Sai	Bangalore	Programming in C	1	9.5
2	Sri	Mysore	Programming in C	1	6.0
3	Kumar	Bangalore	Data Science	4	8.0
4	Akshay	Bangalore	Data Science	4	9.0
5	Rajesh	Bangalore	Data Science	4	9.0

Display the name of toppers in each course ordered by the highest CGPA first.

```
Select vname ,course,cgpa,dense_rank() over (partition by course order by cgpa desc) as rankVal
from student2
```

Affected\_rows: 8

vname	course	cgpa	rankVal
Kumar	Big Data	8.0	1
Akshay	Data Science	9.0	1
Rajesh	Data Science	9.0	1
Kumar	Data Science	8.0	2
Sai	Data Structures	7.0	1
Ram	Data Structures	4.0	2
Sai	Programming in C	9.5	1
Sri	Programming in C	6.0	2

Question #13 Executable SQL

5 Marks

Please Consider the below schemas/tables

student2

field	Type
address	varchar(50)
CGPA	decimal(3,1)
course	varchar(20)
roll	int
semester	int
vname	varchar(30)

roll	vname	address	course	semester	CGPA
1	Sai	Bangalore	Programming in C	1	9.5
2	Sri	Mysore	Programming in C	1	6.0
3	Kumar	Bangalore	Data Science	4	8.0
4	Akshay	Bangalore	Data Science	4	9.0

id	name	city	course	id	cgpa
5	Rajesh	Bangalore	Data Science	4	9.0

List the courses under each semester where none of the students scored less than 5.

```

Select Distinct semester,course
from student2
where course not in(
select course from student2
where cgpa<5
);

```

Affected\_rows: 3

semester	course
1	Programming in C
4	Data Science
4	Big Data

Question #14 Executable SQL

3 Marks

Please Consider the below schemas/tables

details

field	Type
accomplishments	varchar(50)
address_city	varchar(20)
email_ID	varchar(20)
school_id	int

  

address_city	email_ID	school_id	accomplishments
Banglore	jsingh@geeks.com	1020	ACM ICPC selected
Hvderabad	nraveen@geeks.com	1030	Geek of the month

city	email	score	status
Delhi	rithvik@geeks.com	1012	IOI finalist
Chennai	om@geeks.com	1111	Geek of the year
Banglore	suraj@geeks.com	1008	IMO finalist

marks

field	Type
s_id	int
school_id	int
score	int
status	varchar(20)

  

school_id	s_id	score	status
1004	1	23	fail
1008	6	95	pass
1012	2	97	pass
1016	7	67	pass
1020	3	100	pass

student

field	Type
s_id	int
s_name	varchar(20)

  

s_id	s_name
1	Jack
2	Rithvik
3	Jaspreet
4	Praveen
5	Bisa

Display the names of all the students and their corresponding email IDs. Fetch the names of those students as well who do not have an email address provided.

```

select s.s_id,s.s_name,m.school_id,d.email_id
from student s
left join
marks m
on s.s_id=m.s_id
left join
details d
on m.school_id=d.school_id

```

Affected\_rows: 6

s_id	s_name	school_id	email_id
1	Jack	1004	
2	Rithvik	1012	rithvik@geeks.com
3	Jaspreet	1020	jsingh@geeks.com
4	Praveen	1030	praveen@geeks.com
5	Bisa	1040	
6	Suraj	1008	suraj@geeks.com