

Q1:

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following script:

```
1 * set sql_safe_updates = 0;
2 * alter table census drop age;
3 * ALTER TABLE census ADD age INT;
4 * update census set age = 2021 - substring(cast(id_number as char(20)),6,4);
5 * select * from census;
```

The results pane shows a table with columns: id_Number, city, latitude, longitude, BMI, score, and age. The data is sorted by id_Number. The first few rows are:

id_Number	city	latitude	longitude	BMI	score	age
10000199502175250	Stalber	119.269113	130.288157	26.89232313815483	81.81523435987097	26
10007199803207225	Gatka	48.797459	56.618105	NULL	NULL	23
10010193512212145	Sosnovka	107.225095	2.559394	21.56476002629849	72.32159488858207	86

The bottom pane shows the execution log with the following messages:

- 102 19:14:58 SET SQL_SAFE_UPDATES=0: 0 row(s) affected
- 103 19:14:58 alter table census drop age: 0 row(s) affected
- 104 19:14:58 ALTER TABLE census ADD age INT: 0 row(s) affected
- 105 19:14:58 update census set age = 2021 - substring(cast(id_number as char(20)),6,4): 22006 row(s) affected
- 106 19:14:59 select * from census LIMIT 0, 1000: 1000 row(s) returned

Q2:

	id_Number	city	latitude	longitude	BMI	score	age
	10000199502175250	Stalber	119.269113	130.288157	26.89232313815483	81.81523435987097	26
	10007199803207225	Gatka	48.797459	56.618105	NULL	NULL	23
	10010193512212145	Sosnovka	107.225095	2.559394	21.56476002629849	72.32159488858207	86
	10015194409302177	Pochinki	68.537627	54.480942	29.60837581270413	65.1974615310799	77
	10018197903299903	Gatka	42.52907	50.354124	NULL	NULL	42
	10025196310069705	Gatka	25.97749	58.036521	36.01843655566069	68.2464902028276	58
	10025197804231749	Georgopol	46.993168	108.165449	24.435186668803073	84.0629365933077	43
	10031194307033361	Sosnovka	78.619438	17.824356	14.792899408284022	61.92334108190335	78
	10042194403261119	Severn	92.136122	102.888965	13.979879937501714	60.35319663125143	77
	10059197503163805	Rozhok	69.066014	86.501691	14.561760355029584	68.38777647919132	46
	10063194504039566	Severn	76.43039	129.497934	41.62330905306971	56.220960389108576	76
	10068196311013633	Lipovka	134.083636	70.077402	20.747550193111813	76.85990901925986	58
	10081199709078081	Pochinki	62.68384	50.35413	20.76798269347758	83.8423665277898	24
	10082198308012653	Georgopol	49.08329	82.151508	24	77.76121794166667	38
	10088195907319178	Stalber	109.489644	114.811653	NULL	NULL	62
	10088200011174352	Novorepn...	112.851689	28.081859	11.111111111111111	79.70019329259259	21
	10096194408172491	Lipovka	142.143394	70.559919	12.20435990236512	65.52950320197093	77

Q3:

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following script:

```
0 * with score as (SELECT 25*(vital_cap/5200 + metabolism/2000 + 1 - ABS(age-25)/75 + 1 - ABS(bmi-23)/30) as score, c.id_Number
1 * inner join (
2 * select M(exam_date) as 'date', ppe.id_Number
3 * from patients_physical_exam ppe
4 * group by ppe.id_Number) d on ppe.id_Number=d.id_Number inner join patient_info pi on ppe.id_Number=pi.id_Number inner join c
5 * update census c
6 * inner join score s on c.id_Number=s.id_Number
7 * set c.score = s.score
8 *
9 * update census set score =(select * from (select avg(score) from audiences_info) as ave) where score is null;
10 * select * from census;
```

The results pane shows a table with columns: id_Number, city, latitude, longitude, BMI, score, and age. The data is sorted by id_Number. The first few rows are:

id_Number	city	latitude	longitude	BMI	score	age
1182019403143708	Quany	43.509425	43.857886	76	64.67960019991475	76
11821193702223570	Yanava	119.430655	96.45485	43.74999999999999	64	41.50732598333345
11821200712126407	Quany	37.083434	40.767886	15.346154798148564	84	578753851238

The bottom pane shows the execution log with the following messages:

- 66 22:30:41 alter table census drop score: 0 row(s) affected
- 67 22:30:41 alter table census add score double: 0 row(s) affected
- 68 22:30:41 with score as (SELECT 25*(vital_cap/5200 + metabolism/2000 + 1 - ABS(age-25)/75 + 1 - ABS(bmi-23)/30) as score, c.id_Number: 19219 row(s) affected
- 69 22:30:42 update census set score =(select * from (select avg(score) from audiences_info) as ave) where score is null: 2787 row(s) affected
- 70 22:30:42 select * from census LIMIT 0, 1000: 1000 row(s) returned

Q4:

	Name	id_Number	row_Number	seat_Number	auditorium_Number	test_result	score
▶	Aaron Cave	16468200709121559	46	47	4	False	82.5003
	Aaron Cullins	31326194909026791	14	13	6	False	58.8256
	Aaron Jones	22363196908218633	68	29	4	False	75.8135
	Aaron Kimmer	39393193504274332	33	36	2	True	72.5761
	Aaron Selby	98571194410035095	40	22	4	False	70.6471
	Aaron Tamura	32143194906296211	26	23	6	False	64.6798
	Aaron Turner	43262193503188083	31	36	2	True	65.8712
	Aaron Wallin	38689197101147259	39	46	4	False	80.6217
	Aaron Watkins	99453198307304264	49	40	4	False	79.3708
	Abbey Olson	39662196108256461	31	51	4	False	63.313
	Abbie Lee	16807196510053133	29	54	4	False	78.1345
	Abigail Cantu	57718198201228941	56	3	2	False	66.8648
	Abraham Burns	78478198504119354	44	42	1	False	67.5599
	Abraham Meza	37103193906117005	39	66	1	False	56.0529
	Abraham Rutl...	93505197301309622	48	62	4	False	73.0248
	Ada George	49649198403043568	27	29	3	False	81.9541

Q5:

MySQL Workbench interface showing Query 5. The query editor contains the following SQL script:

```

1 SET SQL_SAFE_UPDATES = 0;
2 CREATE TABLE f AS (SELECT * FROM city_policy NATURAL LEFT JOIN level_description ORDER BY city);
3 UPDATE f SET description = (SELECT description FROM level_description WHERE level_description.level = f.level);
4 SELECT * FROM f;

```

The results grid displays the following data:

level	description
2	Alert - Practice Enhanced Precautions
1	Watch - Practice Usual Precautions
1	Watch - Practice Usual Precautions
1	Watch - Practice Usual Precautions
3	Warning - Avoid Nonessential Travel
2	Alert - Practice Enhanced Precautions
1	Watch - Practice Usual Precautions
1	Watch - Practice Usual Precautions
3	Warning - Avoid Nonessential Travel
3	Warning - Avoid Nonessential Travel
3	Warning - Avoid Nonessential Travel
2	Alert - Practice Enhanced Precautions

The output pane shows the following execution log:

```

87 14:32:21 DROP TABLE 'dbproject'.f
88 14:32:22 SET SQL_SAFE_UPDATES=0
89 14:32:22 create table f (select * from city_policy natural left join level_description order by city)
90 14:32:23 update f set description=(select description from level_description where level_description.level = f.level)
91 14:32:23 select * from f LIMIT 0, 1000

```

Q6:

MySQL Workbench interface showing Query 6. The query editor contains the following SQL script:

```

1 CREATE TABLE f1 AS (SELECT Name FROM (SELECT * FROM patient_info NATURAL RIGHT JOIN dbproject.positive_cases) AS f);
2 SELECT Name FROM f1 WHERE Name LIKE "test" OR "test2";

```

The results grid displays the following data:

Name
Bernice Lance
Cathleen Bryant
Arthur Buffalo
Bruce Allen
Benedict Hadley
Amenda Bradford
Erin Creighton
Anaels Bell
Brenda Skagman
Doreen Burden
Kimberly Mahutan
Rosaleia Barnes
Tonya Roberson
James Barry
Robin Mills
Roger Robinson

The output pane shows the following execution log:

```

131 19:52:29 SHOW COLUMNS FROM 'dbproject'.f
132 19:52:51 SELECT 'level','description','city' FROM 'dbproject'.f
133 19:54:05 select * from (select * from patient_info natural right join positive_cases id_Number) as f1 where Name like "test" or "test2" LIM
134 19:56:06 SELECT * FROM dbproject.f1 LIMIT 0, 1000
135 19:56:36 select Name from f1 where Name like "test" or "test2" LIMIT 0, 1000

```

MySQL Workbench

Local instance MySQL80 x unconnected x unconnected x unconnected x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

dbproject

- assigned_hospital
- audiences
- city
- city_policy
- f1
- hospital_info
- level_description
- patient_info
- patients_physical_exam
- positive_billing_info
- positive_cases
- positive_exam
- positive_physical_exam
- visit2test

Administration schemas

Information

Table: f

Columns:

- level: text
- description: text
- city: text

Query Editor

```
1 #create table f1 as (select * from patient_info natural right join dbproject.positive_cases)as f);
2 * select Name from f1 where Name like "tes" or "bts" ;
3 * select count(Name) from f1 where Name like "tes" or "bts" ;
```

Result Grid

Filter Rows: Export: Wrap Cell Contents:

count(Name)

137

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

Read Only Context Help Stop

Output

Actor Output

Time	Action	Message	Duration / Fetch
133 19:54:05	select * from (select * from patient_info natural right join positive_cases id_Number) as n1 where Name like "%B%" or "%b%" LIM	Error Code: 1049: Unknown database 'positive_cases'	0.000 sec
134 19:56:06	SELECT * FROM dbproject.f1 LIMIT 0, 1000	1000 row(s) returned	0.000 sec / 0.000 sec
135 19:56:36	select Name from f1 where Name like "%B%" or "%b%" LIMIT 0, 1000	357 row(s) returned	0.000 sec / 0.000 sec
136 19:58:05	select Name from f1 where Name like "%B%" or "%b%" LIMIT 0, 1000	357 row(s) returned	0.000 sec / 0.000 sec
137 19:58:05	select count(Name) from f1 where Name like "%B%" or "%b%" LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Query Completed