

Task 3

Question 1

Outputs:

Auditorium1: 53 seconds

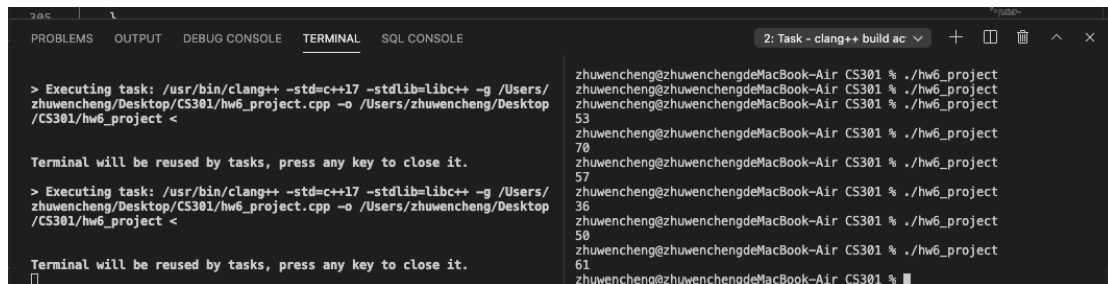
Auditorium2: 70 seconds

Auditorium3: 57 seconds

Auditorium4: 36 seconds

Auditorium5: 50 seconds

Auditorium6: 61 seconds



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL SQL CONSOLE
2: Task - clang++ build ac + - - - - -
> Executing task: /usr/bin/clang++ -std=c++17 -stdlib=libc++ -g /Users/
zhuwencheng/Desktop/CS301/hw6_project.cpp -o /Users/zhuwencheng/Desktop
/CS301/hw6_project <
Terminal will be reused by tasks, press any key to close it.
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zhuwencheng/Desktop/CS301/hw6_project.cpp -o /Users/zhuwencheng/Desktop
/CS301/hw6_project <
Terminal will be reused by tasks, press any key to close it.
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
53
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
70
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
57
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
36
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
50
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
61
zhuwencheng@zhuwenchengdeMacBook-Air CS301 %
```

Question 2:

Local instance 3306

Administration Schemas task3

Limit to 50000 rows

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

```
1 select max('row_number')
2 from audiences;
3
4 select max(seat_number)
5 from audiences;
6
7 select count(*)
8 from audiences
9 where auditorium_number=1;
10
11 select *
12 from audiences
13 where auditorium_number=1;
14
15 insert into alert_info_1
16 select * from alert_info_2;
17
18 insert into alert_info_1
19 select * from alert_info_3;
20
21 insert into alert_info_1
22 select * from alert_info_4;
23
24 insert into alert_info_1
25 select * from alert_info_5;
26
27 insert into alert_info_1
28 select * from alert_info_6;
29
30 select Name, id_number, ExposureTime
31 from alert_info_1;
32
```

Action Output

Time A Response

192 23:16:28 U Error Code: 1205: LOCK wait timeout exceeded; try restarting transaction

193 23:16:36 W 28103 row(s) returned

SQL script saved to 'D:\Users\zhuwencheng\Documents\Duke Writings\Fall 2020\CS301\project_wz136\task3.sql'

Local instance 3306

Administration Schemas Q4 Q3* SQL File 5*

Limit to 50000 rows

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

```
1 select max('row_number')
2 from audiences;
3
4 select max(seat_number)
5 from audiences;
6
7 select count(*)
8 from audiences
9 where auditorium_number=1;
10
11 select *
12 from audiences
13 where auditorium_number=1;
14
```

Result Grid

Filter Rows: Search Export

Name	id_number	row_number	seat_number	auditorium_number	test_result	score
Aaron Benda	20922194710201144	53	25	1	True	72
Aaron Garcia	76566199901314185	9	38	1	False	73
Aaron Nicholson	92036194211163363	24	38	1	False	69
Abel Hale	76279201008228658	18	37	1	False	80
Ada Begley	31986195506201917	11	14	1	True	75
Adalberto Lafferty	66104193304089007	44	35	1	True	71
Adam Courtney	35647195007016008	23	9	1	False	64
Adam Higgins	67865197610072301	2	5	1	False	73
Adam Lovison	40526199202078753	43	3	1	False	75
audiences 64						

Table: alert_info_1

Columns:

Name text

id_number bigint

test_result text

row_number int

seat_number int

Local instance 3306

Administration Schemas Q4 Q3* SQL File 5*

Export Resultset

Save As: audiences_info_6.csv

Tags:

Format: CSV (; separated)

Cancel Save

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

Name	id_number	row_number	seat_number	auditorium_number	test_result	score
Aaron Higgins	64123195912113178	33	50	6	False	73
Abram Rhodes	12879195308161211	52	7	6	True	60
Adam Daniels	48544201506041481	27	6	6	True	74
audiences 53						

Action Output

Time Action Response

83 20:31:42 select * from audiences whe... 2560 row(s) returned 0.0054 sec / 0.016 sec

84 20:32:22 select * from audiences whe... 2865 row(s) returned 0.0032 sec / 0.023 sec

Query Completed

1. Select part of the table where the auditorium number is 1, and export csv file named as audiences_info_1.csv.
2. Run the c++ code where on line 291, read_csv("audiences_info_1.csv") and on line 367, write_csv("alert_info_1.csv" , result, test).
3. The number cout is 53, which is the minimum number of seconds that must elapse until all the audiences in auditorium 1 have been infected.

```

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zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
53
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
70
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
57
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
36
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
50
zhuwencheng@zhuwenchengdeMacBook-Air CS301 % ./hw6_project
61
zhuwencheng@zhuwenchengdeMacBook-Air CS301 %

```

4. Repeat step 1-3 for auditorium 2 to 6.
5. In MySQL, use Table Data Import Wizard, import alert_info_1.csv, alert_info_2.csv, alert_info_3.csv, alert_info_4.csv, alert_info_5.csv and alert_info_6.csv.
6. Insert alert_info_2 to 6 after table alert_info_1.
7. Select Name, id_Number, ExposureTime from alert_info_1. Export the table as alert_info.csv.

Name	id_Number	ExposureTime
Douglas Snelling	55887198004123682	70
Rosa File	55248201204289956	70
Shiela Cardello	66053200803043147	70
Charles Pigeon	73408199201225701	67
Mark Morales	46712201238108443	67
Ann Rice	46340195007067828	66
Jason Hodge	77292201601056219	66
Carol Simpson	34874201708159662	63
Donald Trapani	46103194410079490	62
Jim Schmidt	69052196009141113	62
John Keck	43701194910047279	58
Maribel Manigault	66471197302265808	58
Joanie Haig	60281194207285554	54
Joshua Morrison	56163197505113563	54
Deborah Kazari	37656195501229467	54
Johnnie Moore	67656201804026445	54
Todd Newton	85142198610268589	52
Dawn Bradley	29056196601016015	51
Joanna Sawyer	73481195708225459	51
Shelly Marrara	92220196404052275	51
Tracie Moreno	98839200902154032	51
Travis Sims	59707194801277372	51
Wilma Darby	94236200106091655	51
Alicia Fresh	16252194007258139	51
Ok Champlin	28301199512166254	50
Olivia Feldman	47479200402299966	50
Jeanette Farmer	21267197310146136	50
Peter Humphreys	17182194708208191	50
Paul Wynne	44818196605169471	48
Angela Reichard	26387201110054422	48
Jewell Harris	72237195030086063	48
Bobby Sweet	56526200105177470	47
alert_info_1 63		

8. In the alert_info.csv excel file, order the rows according to descending order of ExposureTime and delete rows with ExposureTime of NULL.