

Task 1:

```
DROP TABLE IF EXISTS Social_Function_Usage;
CREATE TABLE Social_Function_Usage(
    id INT PRIMARY KEY NOT NULL AUTO_INCREMENT,
    Call_Function VARCHAR(20) NOT NULL,
    Date DATETIME NOT NULL
);
```

#comment: please change delimiter to \$\$ while running following code

```
DROP PROCEDURE IF EXISTS TopBusinessOfDay $$  
CREATE PROCEDURE TopBusinessOfDay(  
    IN givenbusiness VARCHAR(20),  
    IN givendate DATETIME)  
BEGIN  
    SELECT distinct business.id, business.name, COUNT(review.id) as reviews, business.stars  
        FROM business, review, category  
        WHERE business.id = category.business_id AND business.id =  
review.business_id AND category.category = givenbusiness AND review.date =  
givendate GROUP BY business.id ORDER BY reviews DESC LIMIT 1;  
    INSERT INTO Social_Function_Usage(Call_Function, Date) values  
('TopBusinessOfDay', now());  
END  
$$
```

```
DROP PROCEDURE IF EXISTS Top10StarsBusiness $$  
CREATE PROCEDURE Top10StarsBusiness(  
    IN beginyear DATETIME,  
    IN endyear DATETIME  
)  
BEGIN  
    SELECT distinct business.id, business.name, AVG(review.stars) as rate,  
business.stars  
        FROM business JOIN review ON business.id = review.business_id JOIN user ON  
review.user_id = user.id WHERE user.fans > 10 AND review.date BETWEEN beginyear  
AND endyear GROUP BY business.id ORDER BY rate DESC LIMIT 10;  
    INSERT INTO Social_Function_Usage(Call_Function, Date) values  
('Top10StarsBusiness', now());  
END  
$$
```

```
#comment: test first procedure in phpmyadmin:  
CALL TopBusinessOfDay('Restaurants', '2016-12-25');  
#the result of screenshot: (it is the same with my homework 3)
```

The screenshot shows the phpMyAdmin interface for the database `yelp_db`. The left sidebar displays the database structure, including tables like `business`, `category`, and `review`, and procedures like `New`, `Top10StarsBusiness`, and `TopBusinessOfDay`. The main query results area shows the output of the `TopBusinessOfDay` procedure:

```
CALL TopBusinessOfDay('Restaurants', '2016-12-25')
```

<code>id</code>	<code>name</code>	<code>reviews</code>	<code>stars</code>
YJ8ijUhLsz6Clt_2ORNfmg	Gordon Ramsay Pub & Grill	7	3.5

Below the table, there are options to print the view or create a new view.

```
SELECT * FROM Social_Function_Usage;  
#As you can see, the Social_Function_Usage table has been inserted into new records.
```

The screenshot shows the phpMyAdmin interface for the 'yelp_db' database. The left sidebar lists various tables and procedures under the 'yelp_db' schema. The 'Social_Function_Usage' table is selected, and its contents are displayed in the main pane. The SQL query at the top is:

```
SELECT * FROM Social_Function_Usage
```

The results show two rows:

	id	Call_Function	Date
1	1	TopBusinessOfDay	2018-11-19 12:27:00
2	2	TopBusinessOfDay	2018-11-19 12:35:45

Below the table, there are 'Query results operations' buttons for Print view, Export, Display chart, and Create view.

```
#test second procedure in phpmyadmin:  
CALL Top10StarsBusiness('2016-01-01', '2017-01-01');  
#the result of screenshot: (it is the same with my homework 3)
```

The screenshot shows the phpMyAdmin interface for the 'yelp_db' database. The left sidebar lists databases (library, mysql, test, yelp), tables (New, attribute, business, category, checkin, elite_years, friend, hours, photo, review, Social_Function_Usage, tip, user), and procedures (Top10StarsBusiness, TopBusinessOfDay). The 'Social_Function_Usage' table is selected, displaying the following data:

id	name	rate	stars
BKYtacei6GDnCxozadACJg	Arizona Theatre Company	5.0000	4
0bF6jv97Z6VbruRpepUCw	Cholla Prime Steakhouse & Lounge	5.0000	4.5
TwVIAGoD_AEGzjH--DAyw	Sunnybrook Health Sciences Centre	5.0000	4
5wObkrnzlk5YQSYf0_g0bA	Samsung Experience Store	5.0000	2.5
9B5a8Kacujkhmb9kdeMX_A	LV Traffic Ticket Guy	5.0000	4.5
gBQI64vIkA-kIDFGM290dw	Sultan's Grill	5.0000	3.5
NoecXgDQc9yUgUWj3EA2cg	Operation Christmas Child	5.0000	5
VTO9G7Sqi2JjASsvt4ixA	Peoria Pines Golf	5.0000	3
uzUa8D6WHTjX0kRYLxluw	Honest Abe Carpet and Upholstery Care	5.0000	5
7IAWQwmWXdac0hvU7DqXQw	Village ABC I	5.0000	3.5

```
SELECT * FROM Social_Function_Usage;
```

The screenshot shows the phpMyAdmin interface for a MySQL database named 'yelp_db'. The left sidebar lists databases (binary, mysql, test, yelp), schemas (yelp, yelp_db), and tables (New, attribute, business, category, checkin, elite_years, friend, hours, photo, review, Social_Function_Usage, tip, user). The 'Social_Function_Usage' table is selected. The main area displays the results of the SQL query:

```
SELECT * FROM Social_Function_Usage
```

The results show three rows:

	id	Call_Function	Date
<input type="checkbox"/>	1	TopBusinessOfDay	2018-11-19 12:27:00
<input type="checkbox"/>	2	TopBusinessOfDay	2018-11-19 12:35:45
<input type="checkbox"/>	3	Top10StarsBusiness	2018-11-19 12:41:06

Below the table, there are buttons for 'Check All', 'With selected:', and 'Edit'.

#As you can see, the Social_Function_Usage table has been inserted into new records.

Task 2:

I write task2.html (creating a query page for user) and task2.php (deal with user input and show the result). please check those two file to get details. I merge all functions into one homepage(portal.html), please enter to portal.html and click the link of "Test two stored procedures." and it will take you to task2.html.
task2.html looks like this:

Please type whatever you want to query

Call_Procedure	Procedure_Definition	Input Parameter1	Input Parameter2	Run
TopBusinessOfDay	the business user input business type, such as 'Restaurants', 'Sandwiches' and 'Hair Salons') that has the most reviews on specific day(user input date)	Givenbusiness: 	Givendate: input like this format 'yyyy-mm-dd' 	action1
Top10StarsBusiness	Top 10 averaged review stars businesses from users who have more than 10 fans on specific year(user input the begindate and enddate)	Beginyear: input like this format 'yyyy-mm-dd' 	Endyear: input like this format 'yyyy-mm-dd' 	action2

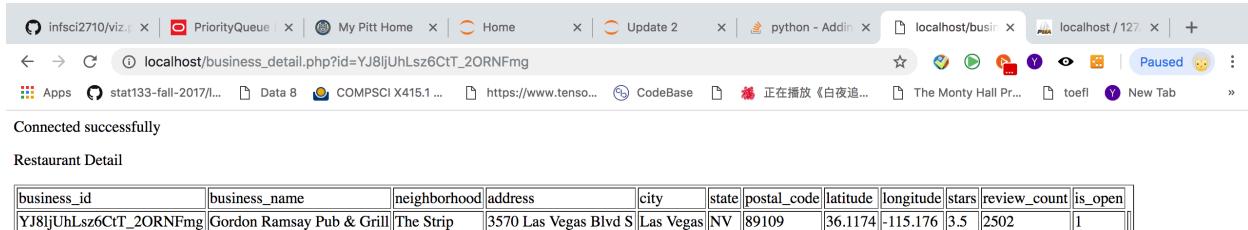
input two parameters(Restaurants, 2016-12-25) and click action1

Call_Procedure	Procedure_Definition	Input_Parameter1	Input_Parameter2	Run
TopBusinessOfDay	the business user input business type, such as 'Restaurants', 'Sandwiches' and 'Hair Salons') that has the most reviews on specific day(user input date)	Givenbusiness: Restaurants	Givendate: input like this format 'yyyy-mm-dd' 2016-12-25	action1
Top10StarsBusiness	Top 10 averaged review stars businesses from users who have more than 10 fans on specific year(user input the begindate and enddate)	Beginyear: input like this format 'yyyy-mm-dd'	Endyear: input like this format 'yyyy-mm-dd'	action2

you will get the result like this, it is the same with my homework 3

business_id	business_name	reviews	stars	details
YJ8ljUhLsz6CrT_2ORNfmg	Gordon Ramsay Pub & Grill	7	3.5	business details

the business_detail link will take you to business_detail.html which shows the details of this specific business. You can see the business_id, name, neighborhood, address, city..etc



The screenshot shows a browser window with multiple tabs open. The active tab is titled "localhost/business_detail.php?id=YJ8ljUhLsz6CtT_2ORNFmg". The content of the page includes a message "Connected successfully" and a section titled "Restaurant Detail". Below this, there is a table with the following data:

business_id	business_name	neighborhood	address	city	state	postal_code	latitude	longitude	stars	review_count	is_open
YJ8ljUhLsz6CtT_2ORNFmg	Gordon Ramsay Pub & Grill	The Strip	3570 Las Vegas Blvd S	Las Vegas	NV	89109	36.1174	-115.176	3.5	2502	1

input two parameters(2016-01-01, 2017-01-01) and click action2

Call_Procedure	Procedure_Definition	Input Parameter1	Input Parameter2	Run
TopBusinessOfDay	the business user input business type, such as 'Restaurants', 'Sandwiches' and 'Hair Salons') that has the most reviews on specific day(user input date)	Givenbusiness: 	Givendate: input like this format 'yyyy-mm-dd' 	action1
Top10StarsBusiness	Top 10 averaged review stars businesses from users who have more than 10 fans on specific year(user input the begindate and enddate)	Beginyear: input like this format 'yyyy-mm-dd' 2016-01-01	Endyear: input like this format 'yyyy-mm-dd' 2017-01-01	action2

you will get the result like this,

business_id	business_name	reviews	stars	details
BK_YtaceifGDnCxozadACjg	Arizona Theatre Company	5.0000	4	business details
0bf6jv97Z6VbruRpepUocw	Cholla Prime Steakhouse & Lounge	5.0000	4.5	business details
TwVtAAGoD_AEGzJH-DAyw	Sunnybrook Health Sciences Centre	5.0000	4	business details
SwObKnrzIk5YQSYf0_g0bA	Samsung Experience Store	5.0000	2.5	business details
9B5a8Kacujkhmb9kdeMX_A	LV Traffic Ticket Guy	5.0000	4.5	business details
gBQH64vIkA-klDFGM290dw	Sultan's Grill	5.0000	3.5	business details
NqecXgDQc9yUgWj3EA2cg	Operation Christmas Child	5.0000	5	business details
VTO9G7Sqis2IjASsvt4IxA	Peoria Pines Golf	5.0000	3	business details
uzUa8D6WHTjX0kRYLXluw	Honest Abe Carpet and Upholstery Care	5.0000	5	business details
7IAWQwmWXdac0hv7DqXQw	Village ABC I	5.0000	3.5	business details

the business_detail link will take you to business_detail.html which shows the details of this specific business. You can see the business_id, name, neighborhood, address, city..etc

The screenshot shows a browser window with multiple tabs open. The active tab is titled "localhost/business_detail.php?id=BKYtacei6GDnCxozadACJg". The page content displays a table with the following data:

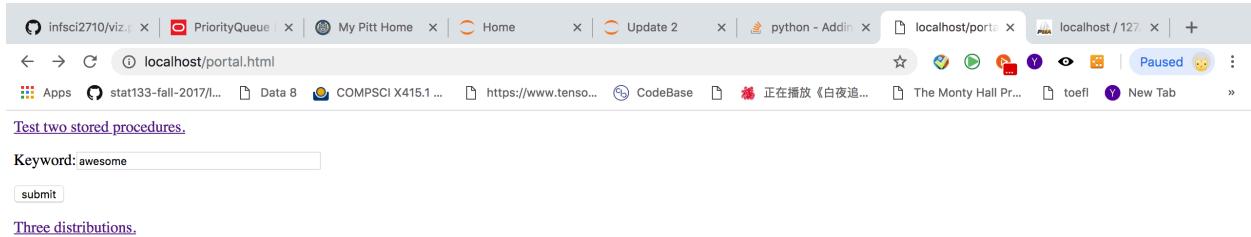
business_id	business_name	neighborhood	address	city	state	postal_code	latitude	longitude	stars	review_count	is_open
BKYtacei6GDnCxozadACJg	Arizona Theatre Company		222 E Monroe St	Phoenix	AZ	85004	33.4511	-112.071	4	35	1

The screenshot shows a browser window with multiple tabs open. The active tab is titled "localhost/business_detail.php?id=0bf6jv97Z6VbruRpepUOcw". The page content displays a table with the following data:

business_id	business_name	neighborhood	address	city	state	postal_code	latitude	longitude	stars	review_count	is_open
0bf6jv97Z6VbruRpepUOcw	Cholla Prime Steakhouse & Lounge		524 N 92nd St	Scottsdale	AZ	85256	33.454	-111.886	4.5	211	1

Task 3:

I write search.php (deal with keyword that user input and show the result). the keyword search page I created is in portal.html, so if you open portal.html and type “awesome” in keyword type area and click submit, it will take you to search.php and get the result. input page like this(portal.html)



However, since there are so many results, so I used limit 20 to just show the first 20 business with review text like “”
the screenshot of result:

Connected successfully

Return top 20 stars business

business_id	business_name	stars	review_text	business_details
s_466owgNXqmQRuSluHHEQ	W Scottsdale	3	I just fell in love with Scottsdale, Arizona and The W Hotel! Stayed here this past weekend for my first time being in Scottsdale. I will say that the love is so real that I do not plan to ever stay anywhere else. This hotel is in such a convenient location that you will never have to take an Uber any where! We were walking distance by the big mall (that I never made it to) and from all the nightlife (which of course I made it to!). As read in the other reviews, this is NOT the place for kids and families to go to and it is loud with music from all the clubs surrounding this place. If you are a light sleeper, good luck! The rooms are pricey but well worth it! PROS: -Cabanas are super reasonable price! On a saturday I got a day bed cabana which consisted of two day beds under a canopy right by the pool and it was only \$100. Perfect for just me and my girlfriend! -Drinks and food were great! So great that all weekend, we ate at the hotel! -The people that work here are so friendly and so beautiful -Pool was perfect for lounging and never over crowded -DJ at the pool on weekends was awesome! -The hotel offers late check out for a small additional fee. We were able to check out at 6:00pm which was perfect because that is the time we needed to leave for the airport. -To use the elevators you need your room key which I love to keep the creepsters out. -The rooms were amazing and the bed was sooooo comfortable! CONS: -During the DJ/Party times at the pool, we weren't allowed to take a nap in our paid cabana. The workers will actually tell you no sleeping. Strange! What if I wasn't sleeping and just resting my eyes! -Not sure when the pool closes but I do wish it was open for a relaxing night swim. Went Sunday night for a night swim and it was closed As you can tell, there were many Pros and not many Cons! Successful hotel! P.S. Stayed for 3 whole days and ONLY left the hotel once! Haha!	business details
kJAmLFgijtjULunpr3NNg	Blue Ribbon Sushi Bar and Grill	3.5	Wow i don't get all the bad reviews. I came with 2 friends and had the most amazing meal ever. We just stopped by on the quicks and glad we did. I would say this place is kinda pricey, but i can't complain. I simply had 2 tiger rolls and breaded chicken wings. OMG sooo GOOD! The wings were marinated perfectly and also the sauce that came with it was very good. We had an awesome server (Joey) and we were well taken care of. We simply sat at the bar and watched the chefs do their work. Although, if i were to come next time, i would simply sit at a table. I kind of like my privacy when talking and that you won't have when the chefs are 3ft away from you. Price for tiger roll i believe was \$24 and for the wings \$20. So would i come back? Hell Yes!	business details
			I went here twice and after leaving with a "eh" feeling after both visits decided it was time to switch to another dermatologist. My first visit I specifically requested Dr. Woodson herself after reading a lot of neutral to negative reviews for her PA and NP. After filling out a ton of paperwork (most of which was not very welcoming- I think I signed about three different forms promising I would definitely pay my bill or be sent to a debt collector. I get they want their money, but what a way to greet your new patients!) I went into the exam room and lo and behold PA John Notabartolo walks into the room. Since I was already there I just went with it. He examined my skin (I went in for some mild adult acne) for less than ten seconds, told me basic skin care advice that I've known about for years, and then wrote me some prescriptions. The whole visit with him lasted about three minutes. No real suggestions or overview of my current skin care regime, no explanation of the possible cause of my condition or what level of severity it was. Basically the only thing I couldn't have found on my own online was the prescriptions. As another reviewer noted, they tend to prescribe the newest brand name drugs and of course both of mine were brand name and expensive!	

the business_detail link will take you to business_detail.html which shows the details of this specific business. You can see the business_id, name, neighborhood, address, city..etc

The screenshot shows a web browser window with multiple tabs open. The active tab displays the URL `localhost/business_detail.php?id=s_466owgNXqmQRuSluHHEQ`. The page content includes a message "Connected successfully" and a section titled "Restaurant Detail". Below this is a table with the following data:

business_id	business_name	neighborhood	address	city	state	postal_code	latitude	longitude	stars	review_count	is_open
s_466owgNXqmQRuSluHHEQ	W Scottsdale		7277 East Camelback Rd	Scottsdale	AZ	85251	33.5015	-111.924	3	356	1

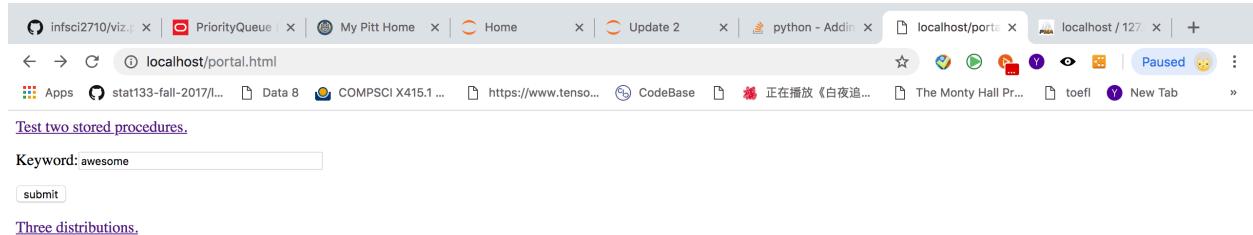
The screenshot shows a web browser window with multiple tabs open. The active tab displays the URL `localhost/business_detail.php?id=kJAmLFgijjtjULunpr3NNg`. The page content includes a message "Connected successfully" and a section titled "Restaurant Detail". Below this is a table with the following data:

business_id	business_name	neighborhood	address	city	state	postal_code	latitude	longitude	stars	review_count	is_open
kJAmLFgijjtjULunpr3NNg	Blue Ribbon Sushi Bar and Grill	The Strip	3708 Las Vegas Blvd S	Las Vegas	NV	89109	36.1097	-115.174	3.5	588	0

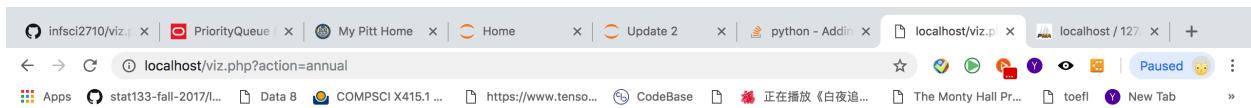
please check search.php and portal.html files to get details.

Task 4:

I merge three distributions into portal.html page, user can click the link of Three distributions and it will take user into viz.php page, can user can click whatever distribution they want.



Click the Three distributions link, you will get the following default page, there are three distributions link.

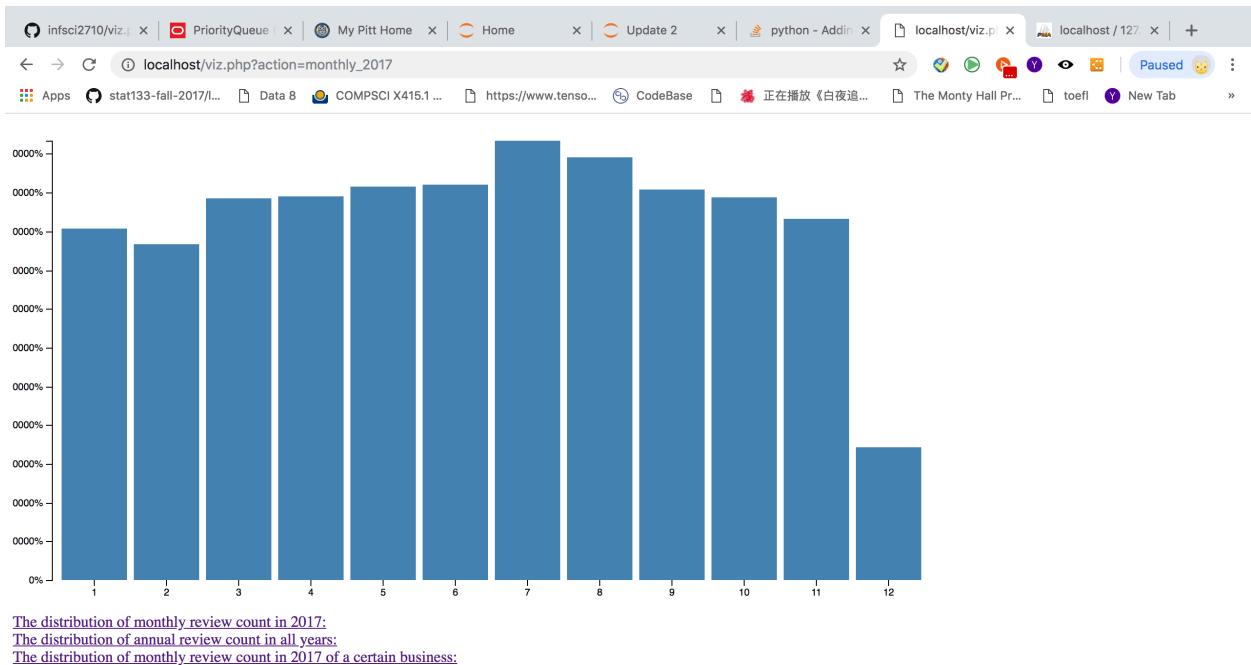


[The distribution of monthly review count in 2017:](#)

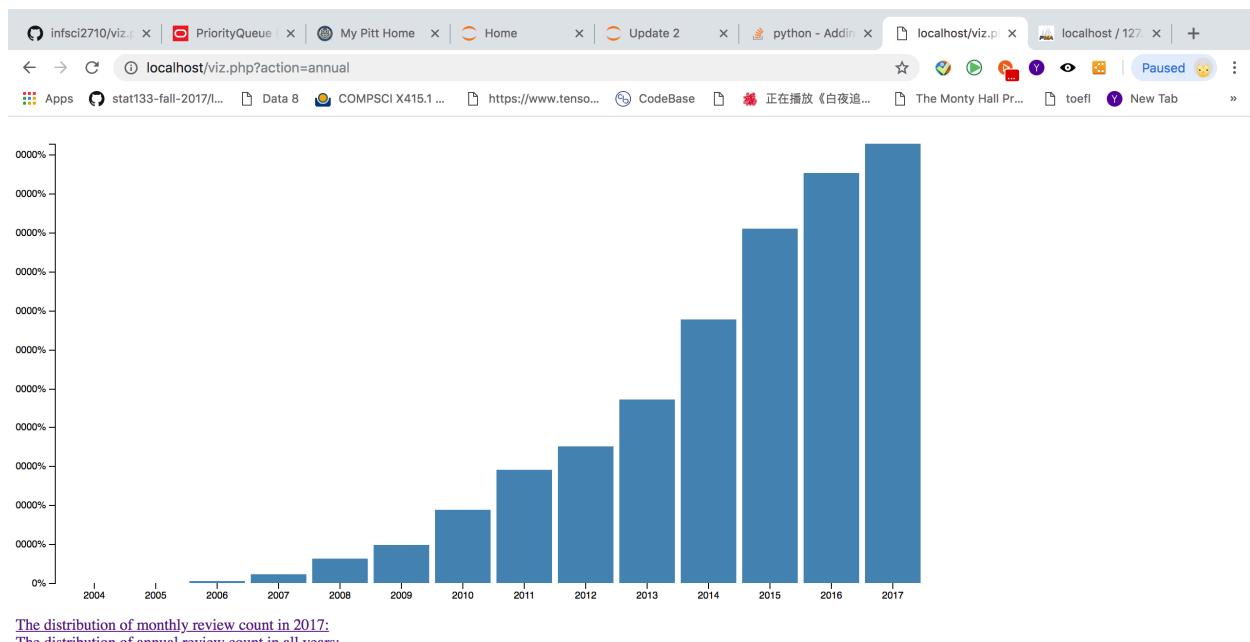
[The distribution of annual review count in all years:](#)

[The distribution of monthly review count in 2017 of a certain business:](#)

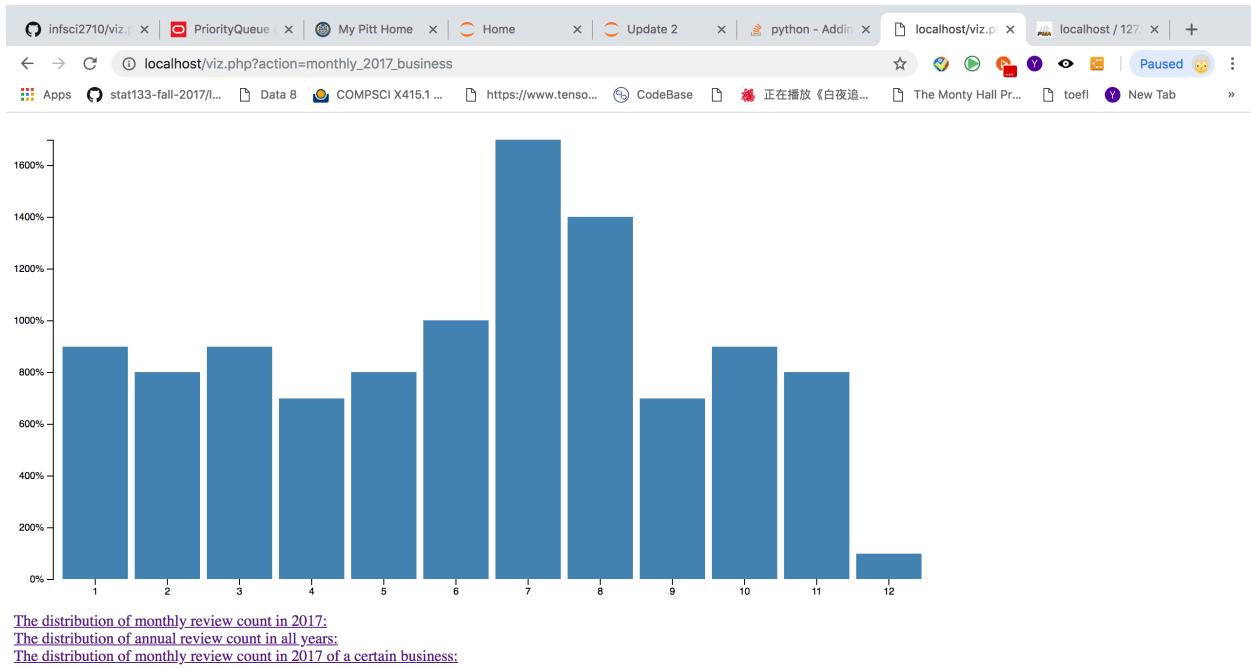
Click the first link, you will get the following result page, This is the distribution of monthly review count in 2017.



Click the second link, you will get the following result page, This is the distribution of annual review count in all years.



Click the third link, you will get the following result page, This is the distribution of annual review count in all years.



Task 5:

I merge all functions into one homepage(portal.html), please enter to portal.html. The first link (Test two stored procedures) is for task 2 functions, click it and enter into task2.html page, then input parameters for task 2 query. The second keyword type area is for task 3, input some keyword and enter into search.php to deal with the user input and get result. The last row of link (Three distributions) is for task 4. click it and enter to viz.php page to look for distributions.
the portal page looks like this:

