1. Separate code blocks and explanations for each of the python functions
2. This is the first function I created. The function is straightforward, as it gives us the main page of the Webapp.

The function has only a few lines, which uses the base.html provided by the professor. We use the return line to start this function with a new page.

1. The second function we created is called view (). The function creates a viewable webpage.
2. First, we call the template view.html, which we will discuss in later parts of this post.
3. Then we fetch the number of messages from the data we inputted.
4. After that, we randomly pick n messages from the database.
5. Lastly, if we submitted nothing, the program outputs error.
6. The third function we defined is called submit ().
7. Return submit.html if we get something.
8. If we did not get anything, we will fetch a function called insert\_message from db\_app.py.
9. The insert\_message () function will be discussed in the later parts of this blog post.
10. The fourth function er defined is get\_message\_db ().
11. First, we connect to the database using cursor.
12. Then we create a database that contains all our messages.
13. If there is no table available, we create a new table with three columns: ID as an integer, handle as text, and message as text.
14. Lastly, we close the database.

In summary, the main use of this function is to add our message and name into the database we just created. Then, we can view our messages.

1. The fifth function we created is called insert\_message ().
2. We read the message and the handle into a database if they exists.
3. Then we connect the database using cursor.
4. To ensure that the ID number of each message is unique, first, I got the current number of rows in message\_db. Then we set the ID number equal to one plus the current number of rows.
5. Lastly, we insert the message into table messages.
6. Then we close the cursor.

This function adds our message and name into the database we just created. Then, we can view our messages.

1. The last function we created is random\_messages, which fetches our data randomly.
2. We connect the database using cursor.
3. Then we extract the message from message database.
4. Then we close the database.

This function allows us to show the messages we just created and specify how many messages we want to extract. If we type 3, it will give use three random messages we just entered.

1. Discussion of a template file I created in my app

I choose to discuss the template file view.html. The file view.html presents us with the random messages chosen if we click on a button.

1. First, we display the line of text “please input how many messages do you want to view (1-5)?” on the website.
2. Then we design the style of the input so that the number has a particular size and is in Arial.
3. We also restrict the number input to be from 1 to 5.

All in all, we create a header, tell the user to submit some interesting message, and finish the html by giving some font and size.