- 1. The program will write "Hello World!" on localhost website with a port number of 27182.
- 2. The program will first search all the files with the name start as "e002" in current directory. After full search, there are two files, one is "e002a.js", one is "e002b.js". In "e002a.js", it contains one function, which will return current time. In "e002b.js", it called the function in "e002a.js", and it will print current time as: "The date and time are currently: " + currentTime in localhost website with a port number of 27182.
- 3. It will return whatever write in the URL, after the port number. For example, if I input "localhost:27182/test1test2test3=4", what will show on the localhost website with the port number of 27182 is /test1test2test3=4.
- 4. It will print two undefined on the website. Line [1] is a function to parse the URL. When finish parsing the URL, it will pass the corresponding value to the two variables named q.year and q.month. If we want to make the program run, I have to make some changes in the URL. For example, the original URL should be: localhost:27182. When we run the URL in a browser, it will print the two undefined on the website as I mentioned in the beginning. But, if I change the URL to: localhost:27182/?year=2000&month=08, it will print 1111 22 on the website. If I missed one of the variable ("year" or "month") in the URL, the corresponding place would print "undefined".
- 5. According to the program, it will first search all files with its name start as "e005" in current directory. As the result shown, there are two files, one is "e005a.html", one is "e005.js". The first cat command shown that the "e005a.html" contains an image, and the source of the image was listed in the .html file. In "e005.js" file, the program will write what included in the "e005a.html" to the localhost server with the port number of 27182, with the image listed in the .html file. If the source of the image was invalid, the localhost server will contains the image, but the image will not be valid.
- 6. localhost:8080 [1]
  /default.htm [2]
  ?year=2017&month=February [3]
  February [5]
- 7. The original program will print "404 Not Found" in the localhost website with the port number 27182. The reason is that there is nothing contained in current directory path. If you do not want "404 Not Found" to be printed in the website, you have to add something into this directory and call it in the URL. For example, I wrote a 123.js file in current directory, and in the URL, instead of the original URL: localhost:27182, I will write: localhost:27182/123.js as my URL, and put it in my browser, the browser will cat the 123.js file and print it on the website.

- **8.** The localhost with a port number of 27182 will contains a form in the beginning. The form will contain a file submitter and a button of "submit". However, after you submit the file, it will always jump into '/something' condition and the website will always show "What just happened?".
- 9. The function will work like the function in question 8. It will start with a form, and let the user to submit a file. After the submission, the website will jump into '/something' condition, and will start to write link the file from the old path to new path. After linking the file to the new path, it will unlink the file with the old path. In stage 1, if anything was error with the old path, it will throw error. No matter old path was correct or not, it will always print "End of stage 01" on the console, which I recognize it as "validation of old path". In the second stage, the program will start write the file to a new path, along with printing "Stage 02 underway." on the console. After successfully writing the file to the new path, the console will print "End of stage 02.". The last stage, when the filesystem successfully link the file to the new path, it will unlink the file with its old path, and print "Stage 03 completed!" after unlinking.
- **10.** Before I run it, I have to make sure host, user, password, database, port are valid in con. If any one of them is invalid, it will always throw error.