Experiment No 1

Write code for above questions:

1: Exporting nested objects and function from Module using exports Object.

2: Reading into a file asynchronously and writing code for handling error if file not found to read.

3: Reading a text file on the server using http and fs module.

4: Write a program that uses a Readable stream to read data from a file (data.txt). Output the file content to the console. Ensure the file exists before reading, and handle any errors if the file is missing.

5: Write a program that creates a Writable stream to write a string ("Hello, Node.js!") to a file (output.txt). If the file already exists, overwrite it. Print a success message once the data is written.

6: Write a program that demonstrates stream piping. Use a Readable stream to read data from a file (input.txt), and pipe it to a Writable stream that writes to another file (output.txt).

queries

Q1

1.What were nested objects?

2.Syntax Problem come while importing the the module to another file.

3.difference in syntax of comman.js and and ES6(Ecma script).

Q2

1.what was ENOENT code means?

2. Different ways to perform the question like without anonymous callback function,commonjs with anonymous callback function and Es6 module.

Q3

1.how to import http module and create http server ?

2.how to responce the write header ?

3.what is ment by 200 status code?

4. What is need of callback function while executing the serever on any port?

Ans-

server.listen(3000, () => {

console.log("Server running at http://localhost:3000");

});

the **callback only runs after** Node.js has finished binding the server to port 3000 (i.e., the server is actually ready to accept requests).

server.listen(3000);

console.log("Server running at http://localhost:3000");

👉 the console.log would execute immediately, without waiting for the server to finish starting.

That means your program might print “Server running…” before the server is truly ready, which could be misleading.

Q4

1.What is node.js filesystem accesss and what different modes are there?

2.how to create readstream and and writestream?

\*with writeStream => finish function , readStream=>end function

3.difference bw fs.readFile and fs.createReadStream , fs.writeFile and fs.createWriteStream.

Q6

1.what is steam pipe.