**Task-1**

**Aim:**

* Write a program that uses the OS module to display the current user's username, home directory, and operating system platform.
* Create a function that utilizes the OS module to display the total system memory, free memory, and the percentage of free memory available.

**Description:**

The OS module in Node JS is used to retrieve and display information about the current user's username, home directory, and operating system platform. The OS module provides functions for interacting with the operating system, and by using specific functions from this module, we can retrieve these details and output them to the console or perform further operations with them.

**Task-2**

**Aim:**

Experiment with chalk, upper-case any other External Modules.

**Description:**

In JavaScript, an external module refers to a separate JavaScript file that contains reusable code and can be imported into another JavaScript file using module import/export syntax. External modules allow you to reuse code across different files and projects.

**Task-3**

**Aim:**

Create your own custom module and import/export it to the main module.

**Description:**

In JavaScript, an external module refers to a separate JavaScript file that contains reusable code and can be imported into another JavaScript file using module import/export syntax. External modules allow you to organize your code into smaller, modular pieces, making it easier to manage and reuse across different files and projects. They promote code modularity, encapsulation, and separation of concerns.

**Combined Source Code of all three tasks:**

**Week3.js file code**

import os from"os";

//  const chalk=require("chalk");

import {sum,sub,mul,div} from "./arithmetic.js";

import chalk from 'chalk';

import { upperCase} from "upper-case";

import http from "http";

const server = http.createServer((req, res) => {

    if (req.method == "GET" && req.url == "/osinfo") {

      res.writeHead(200, { "Content-Type": "application/json"});

    res.end(JSON.stringify({ username : os.userInfo().username,

      homedirectory : os.homedir(),

      platform : os.platform(),

      totalmemory : os.totalmem(),

      freememory : os.freemem(),

      freememorypercentage : ((os.freemem()/os.totalmem())\*100).toFixed(2)+"%"

    }));

    }

    else{

      res.writeHead(404, { "Content-Type": "text/plain" });

      console.log(chalk.red(upperCase("error")));

      res.end("path not available");

    }

  });

  server.listen(8000, () => {

    console.log("listening on port 8000");

  });

sum(5,4);

sub(5,4);

mul(5,4);

div(5,4);

**arithmetic.js file code**

export function sum(a,b){

console.log(a+b);

}

export function mul(a,b){

    console.log(a\*b);

}

export function div(a,b){

    console.log(a/b);

}

export function sub(a,b){

    console.log(a-b);

}

**Output:**





