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Branch: CBA Batch: 41. Sem : 4

Subject: FET

PRACTICAL 5

Objective: To understand the usage of functions and objects in JavaScript.

Exercise 1:

In a part of development an algorithm for security, there is a need to get a perfect number greater than a number entered by the end-user.

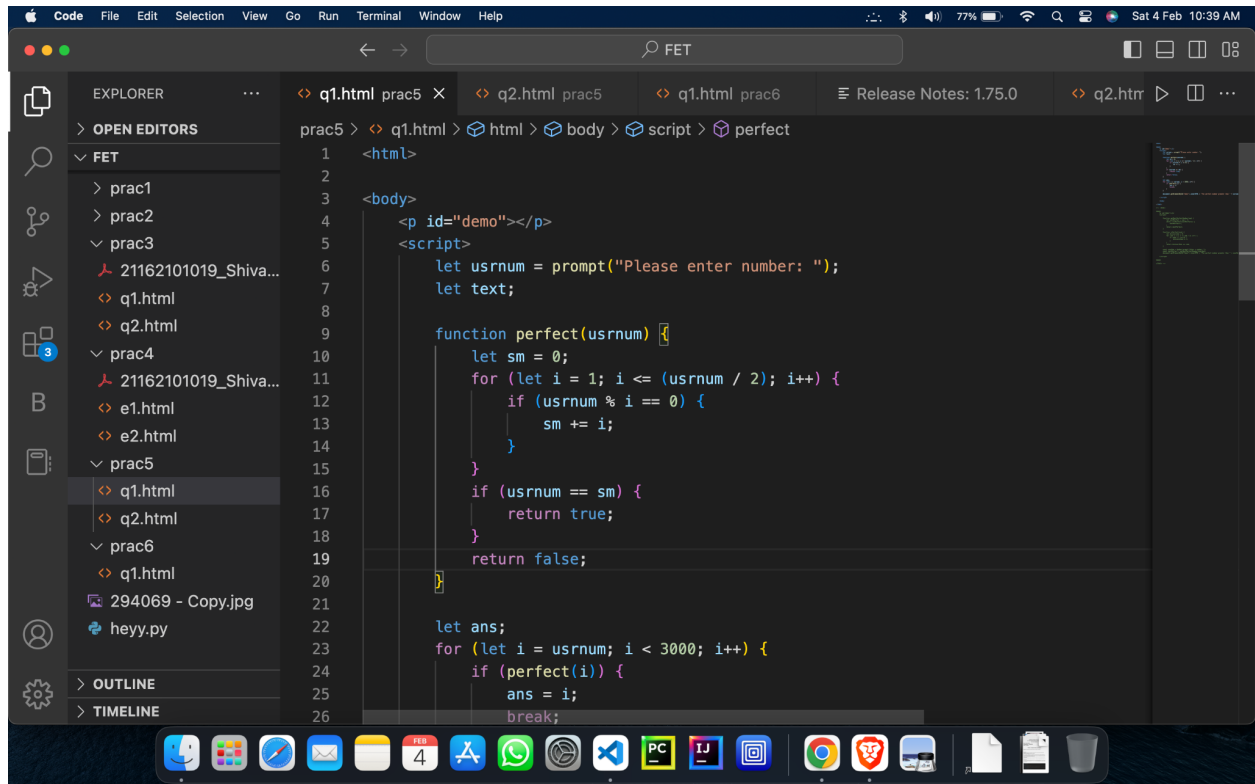
Note : According to Wikipedia : In number theory, a perfect number is a positive integer that is equal to the sum of its proper positive divisors, that is, the sum of its positive divisors excluding the number itself (also known as its aliquot sum).

OR Equivalently, a perfect number is a number that is half the sum of all of its positive divisors (including itself).

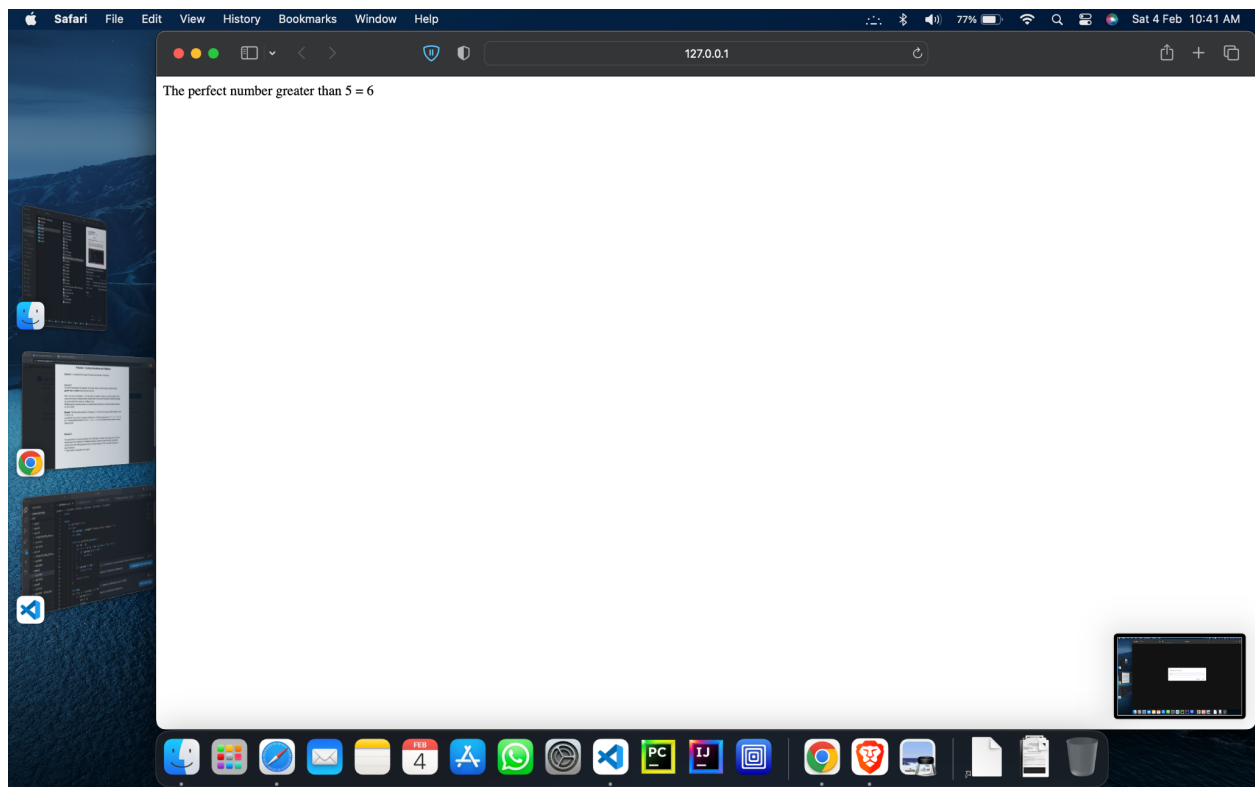
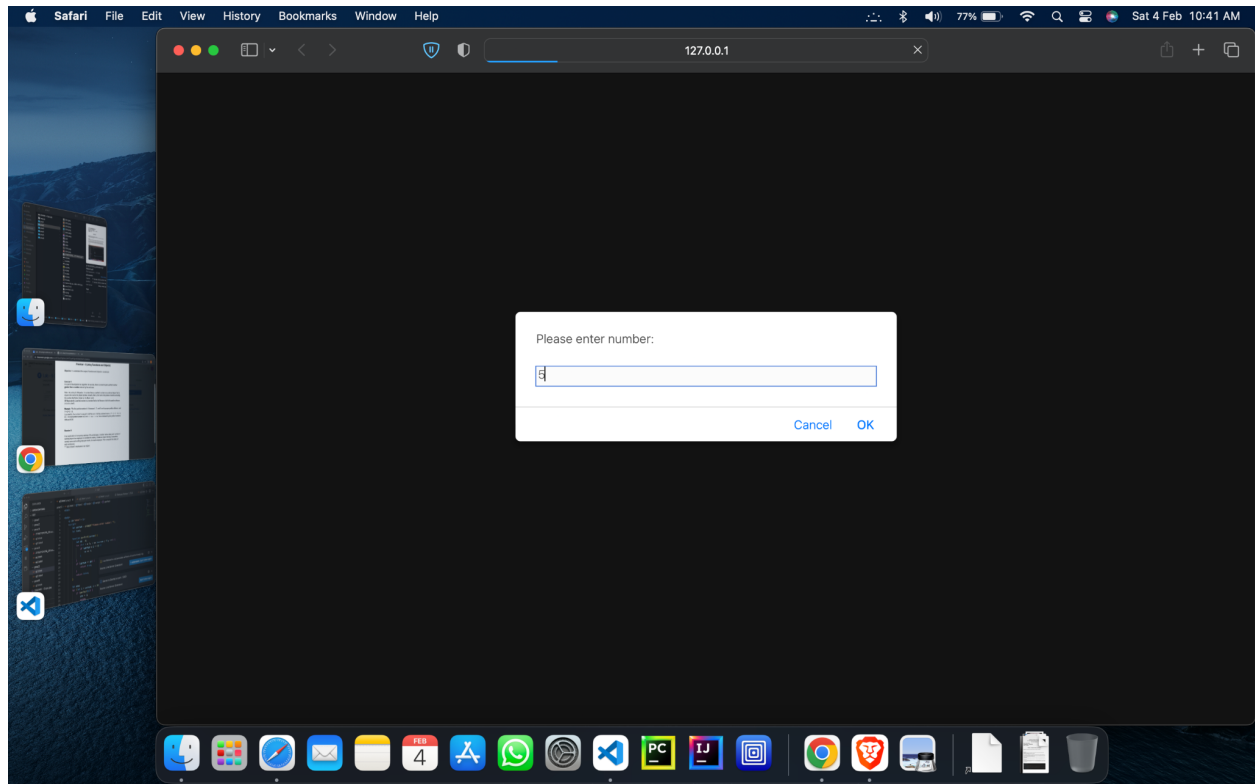
Example : The first perfect number is 6, because 1, 2, and 3 are its proper positive divisors, and $1 + 2 + 3 = 6$.

Equivalently, the number 6 is equal to half the sum of all its positive divisors: $(1 + 2 + 3 + 6) / 2 = 6$. The next perfect number is $28 = 1 + 2 + 4 + 7 + 14$. This is followed by the perfect numbers 496 and 8128.

CODE:



OUTPUT: Q-1)

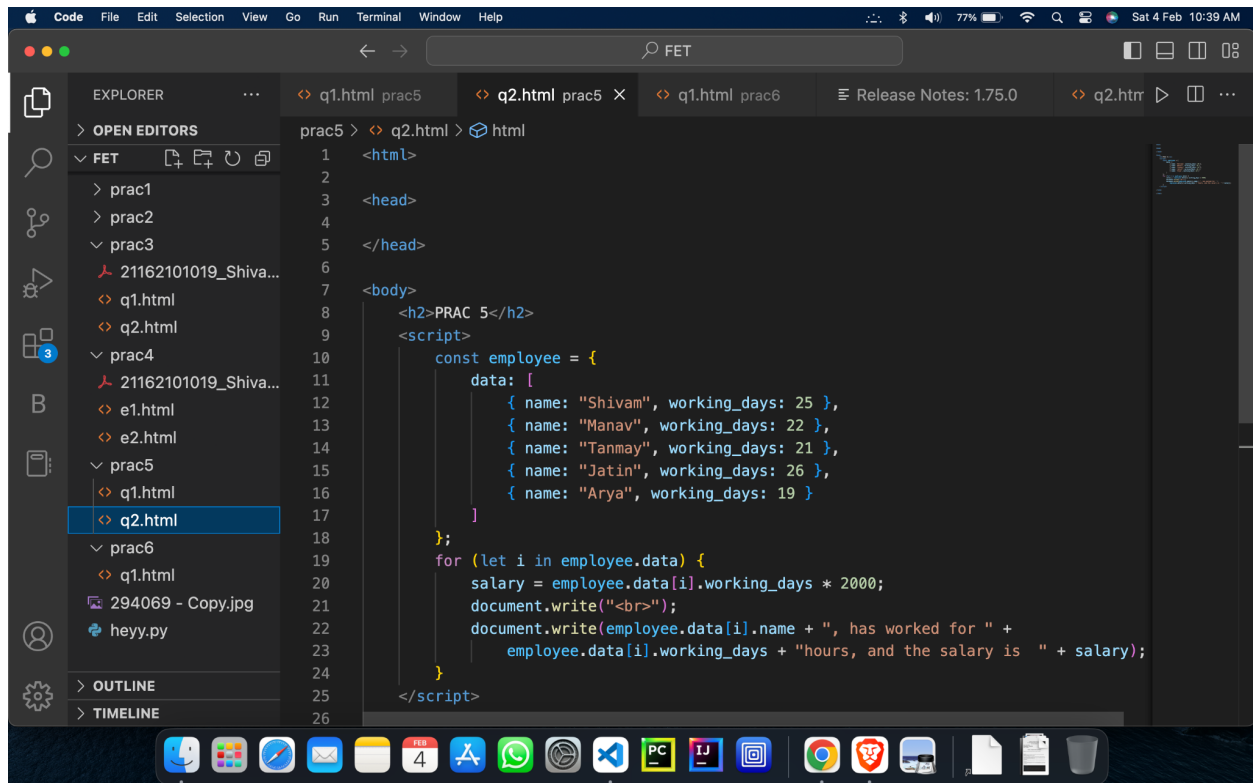


Exercise 2:

In an application of computing salaries of the employees, consider name, salary and number of working days of an employee to calculate his salary. (Create an object having 2 properties, namely name and working days per month, for each employee. Then compute the salary of each employee.)

** Take at least 5 employees in an object.

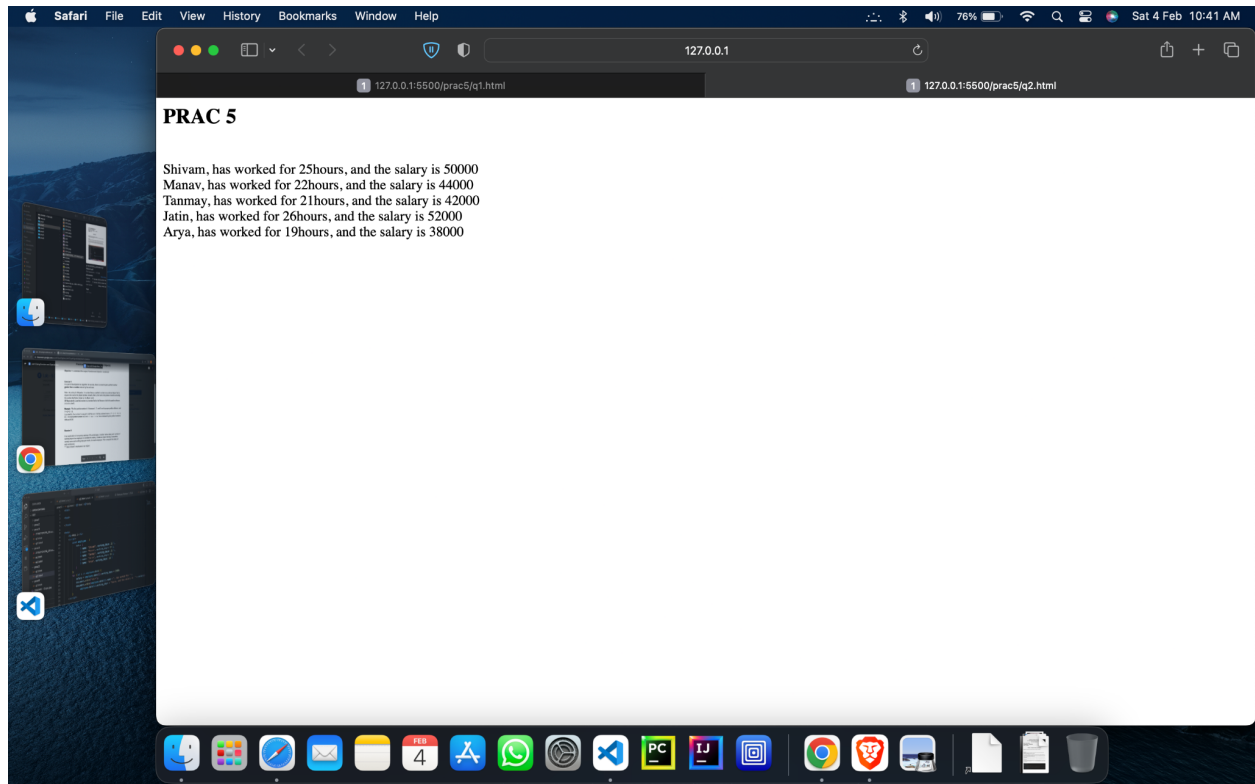
CODE:



The screenshot shows a VS Code editor window with the following content:

```
1 <html>
2
3 <head>
4
5 </head>
6
7 <body>
8   <h2>PRAC 5</h2>
9   <script>
10     const employee = {
11       data: [
12         { name: "Shivam", working_days: 25 },
13         { name: "Manav", working_days: 22 },
14         { name: "Tanmay", working_days: 21 },
15         { name: "Jatin", working_days: 26 },
16         { name: "Arya", working_days: 19 }
17       ]
18     };
19     for (let i in employee.data) {
20       salary = employee.data[i].working_days * 2000;
21       document.write("<br>");
22       document.write(employee.data[i].name + ", has worked for " +
23         employee.data[i].working_days + "hours, and the salary is " + salary);
24     }
25   </script>
26
```

The Explorer sidebar on the left shows a project structure with folders 'prac1' through 'prac6'. The 'prac5' folder is expanded, showing files 'q1.html' and 'q2.html', with 'q2.html' selected. The status bar at the bottom indicates 'Release Notes: 1.75.0'.



GITHUB LINK:

<https://github.com/Shivam3783/FET-PRACTICALS/tree/main/PRAC5>