Name: Tushar Panchal

En.No: 21162101014

Sub: FET(Front End Technologies)

Branch: CBA

Batch:41

----------------------------PRACTICAL 05----------------------------

❖ **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.

✓ **5_1.html :**

```html
<html>
```

```html
<head>
    <script src="1.js"></script>
    <link rel="stylesheet" href="1.css">
    <title>PRACTICAL 5.1-tushar</title>
</head>
<body>
    <button onclick="tk()" class="glow-on-hover"
type="button">
        GENERAL NEXT PERFECT NUMBER
    </button>
</body>
</html>
```
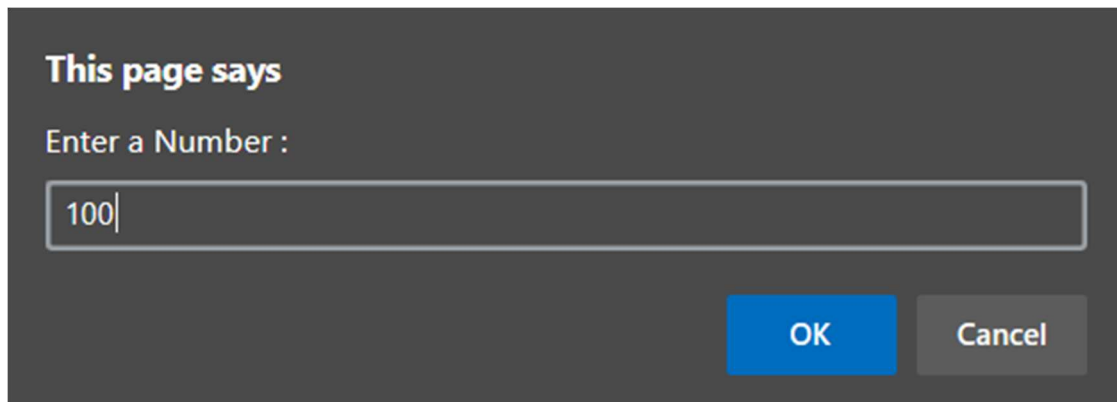
✓ **5_1.js :**

```javascript
let num = prompt("Enter a Number :");
function tk() {
    if (num < 6) {
        alert("Perfect Number: 6");
    }
    else if (num < 28) {
        alert("Perfect Number: 28");
    }
    else if (num < 496) {
        alert("Perfect Number: 496");
    }
    else {
        alert("Perfect Number: 8182");
    }
}
```

✓ **Output Screenshots :**

This page says

Enter a Number :

100

OK   Cancel

This page says

Perfect Number: 496

OK

> ➢ **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.

✓ **5_2.html :**

```html
<html>
<head>
    <title>PRACTICAL 5.2-tushar</title>
    <script src="2.js"></script>
    <style>
        body {
            background-color: black;
        }
    </style>
</head>
<body>
</body>
</html>
```

✓ **5_2.js :**

```js
function tk(name, workdays) {
    this.fullname = name;
    this.days = workdays;
    this.salary = workdays * 2000;
}
let t1 = new tk("Bond", 25);
let t2 = new tk("Tom", 21);
let t3 = new tk("Arthur", 26);
```

```
let t4 = new tk("Jack", 31);
let t5 = new tk("John", 30);
persons = [t1, t2, t3, t4, t5];

for (let i = 0; i < 5; i++) {
    alert("Name : " + persons[i].fullname + " Days Worked :
" + persons[i].days + " Salary : " + persons[i].salary);
}
```

✓ **Output Screenshots :**

This page says

Name : Bond Days Worked : 25 Salary : 50000

OK

This page says

Name : Tom Days Worked : 21 Salary : 42000

OK

This page says

Name : Arthur Days Worked : 26 Salary : 52000

OK

This page says

Name : Jack Days Worked : 31 Salary : 62000

OK

This page says

Name : John Days Worked : 30 Salary : 60000

OK