

To create a JavaScript project with function examples, including calculating age based on the date of birth, and print the output with employee details (empname, empno, city, age, etc.) in the console, you can follow these steps:

1. Open your IDE and create a new folder for your project. Name it something like "functions-and-prototypes-project".
2. Inside the project folder, create two files: "index.html" and "script.js".
3. Open "index.html" in your IDE and add the following basic HTML structure:

```
<!DOCTYPE html>
<html>
<head>
  <title>Functions and Prototypes</title>
  <script src="functions_and_prototypes.js"></script>
</head>
<body>
  <h1>Function Examples</h1>
  <ul id="output"></ul>
</body>
</html>
```

4. In the same project folder, open "script.js" in your IDE and write the JavaScript code for the function examples with employee details and age calculation. Here are four function examples:

```
// Constructor function for an Employee object
function Employee(empname, empno, city, dob) {
  this.empname = empname;
  this.empno = empno;
  this.city = city;
  this.dob = new Date(dob);
}

// Prototype function to display employee details
Employee.prototype.displayDetails = function () {
  console.log(`Employee Name: ${this.empname}`);
  console.log(`Employee Number: ${this.empno}`);
  console.log(`City: ${this.city}`);
}
```

```
console.log(`Age: ${this.calculateAge()}`);
console.log('-----');
};

// Prototype function to calculate age based on date of birth
Employee.prototype.calculateAge = function () {
    const today = new Date();
    const birthDate = this.dob;
    let age = today.getFullYear() - birthDate.getFullYear();
    const monthDiff = today.getMonth() - birthDate.getMonth();

    if (monthDiff < 0 || (monthDiff === 0 && today.getDate() < birthDate.getDate())) {
        age--;
    }

    return age;
};

// Function to calculate the area of a rectangle
function calculateRectangleArea(width, height) {
    return width * height;
}

// Function to check if a number is even
function isEven(number) {
    return number % 2 === 0;
}

// Function to reverse a string
function reverseString(string) {
    return string.split("").reverse().join("");
}

// Example usage of the functions with employee details
```

```
const emp1 = new Employee('John Doe', 1051, 'New York', '1990-05-10');
const emp2 = new Employee('Jane Smith', 1032, 'Los Angeles', '1995-09-15');

emp1.displayDetails();
emp2.displayDetails();
console.log(emp1);
console.log(emp2);
console.log('Rectangle Area:', calculateRectangleArea(5.0, 7.95));
console.log('Is number even?', isEven(141));
console.log('Reversed string:', reverseString('Hello, World!'));
```

In the above code, we define a constructor function `Employee` to create employee objects with properties like `empname`, `empno`, `city`, and `dob` (date of birth). We then define a prototype function `displayDetails` to print the employee details in the console, including the calculated age using the `calculateAge` prototype function. The `calculateAge` function uses the current date and the date of birth to calculate the age.

After that, we have three other functions: `calculateRectangleArea`, `isEven`, and `reverseString`. Finally, we create two employee objects, `emp1` and `emp2`, and call the `displayDetails` function for each of them.

5. Save both files.
6. Open "index.html" in a web browser, and you should see a blank page.
7. Open the browser's developer tools (usually accessible through right-clicking on the page and selecting "Inspect" or "Inspect Element").
8. Switch to the "Console" tab in the developer tools.
9. Reload the "index.html" page.
10. In the console, you should see the output of the function examples with employee details, including the calculated age, printed.
11. To push the code to your GitHub repository, follow the same steps as mentioned in subsection 2.1.3 in the previous responses.

Now you have a JavaScript project with function examples that display employee details, calculate age based on date of birth, and their output is printed in the browser's console.

# Function Examples

Elements	
Console	
Sources	
Network	
1	
Filter	
Default levels	
1 Issue	
Employee Name: John Doe	
Employee Number: 1051	
City: New York	
Age: 33	
-----	
Employee Name: Jane Smith	
Employee Number: 1032	
City: Los Angeles	
Age: 27	
-----	
Employee {empname: 'John Doe', empno: 1051, city: 'New York', dob: Thu May 10 1990 05:30:00 GMT+0530 (India Standard Time)}	
dob: Thu May 10 1990 05:30:00 GMT+0530 (India Standard Time)	
[[Prototype]]: Object	
empname: "John Doe"	
empno: 1051	
[[Prototype]]: Object	
calculateAge: f ()	
displayDetails: f ()	
constructor: f Employee(empname, empno, city, dob)	
[[Prototype]]: Object	
Employee {empname: 'Jane Smith', empno: 1032, city: 'Los Angeles', dob: Fri Sep 15 1995 05:30:00 GMT+0530 (India Standard Time)}	
dob: Fri Sep 15 1995 05:30:00 GMT+0530 (India Standard Time) {}	
empname: "Jane Smith"	
empno: 1032	
[[Prototype]]: Object	
Rectangle Area: 39.75	
Is number even? false	
Reversed string: 1dlr0W ,0lleH	
>	