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DEPT: EEE-“B”

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MERN STACK TRAINING

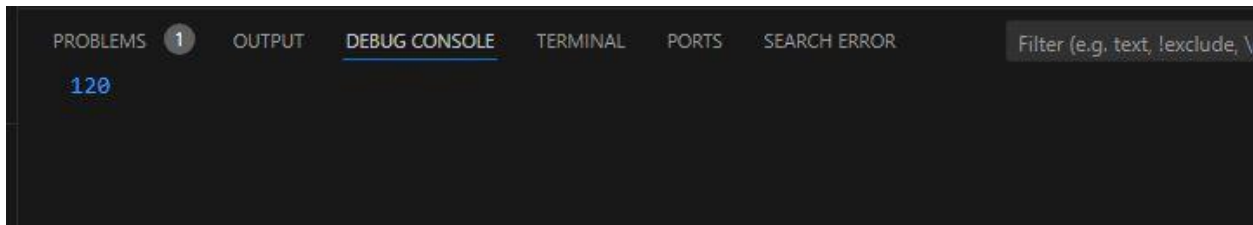
TASK(1-35)

1. Recursion and stack

1.1Task 1: Implement a function to calculate the factorial of a number using recursion.

```
1. <!DOCTYPE html>
2. <html>
3.   <head></head>
4.   <title>webpage</title>
5.   <body>
6.     <script>
7.       function fun(n){
8.         if(n===0 || n===1){
9.           return 1;
10.        }
11.        else{
12.          return n*fun(n-1);
13.        }
14.      }
15.      console.log(fun(5));
16.    </script>
17.  </body>
18. </html>
```

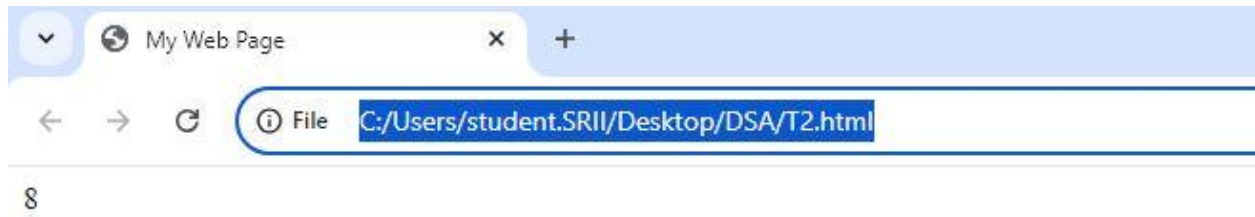
OUTPUT:



1.2 Task 2: Write a recursive function to find the nth Fibonacci number.

```
<!DOCTYPE html>
<html>
  <head>
    <title>
      My Web Page
    </title>
  </head>
  <body>
    <script>
      function fib (n){
        if(n === 0){
          return 0;
        }else if(n === 1){
          return 1;
        }else{
          return fib(n-1) + fib(n-2);
        }
      }
      document.writeln(fib(6))
    </script>
  </body>
</html>
```

OUTPUT:



1.3. Task 3: Create a function to determine the total number of ways one can climb a staircase with 1, 2, or 3 steps at a time using recursion.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Climbing Stairs</title>
  </head>
  <body>
    <script>
      function climb(n) {

        if (n === 0 || n === 1) return 1;

        if (n === 2) return 2;

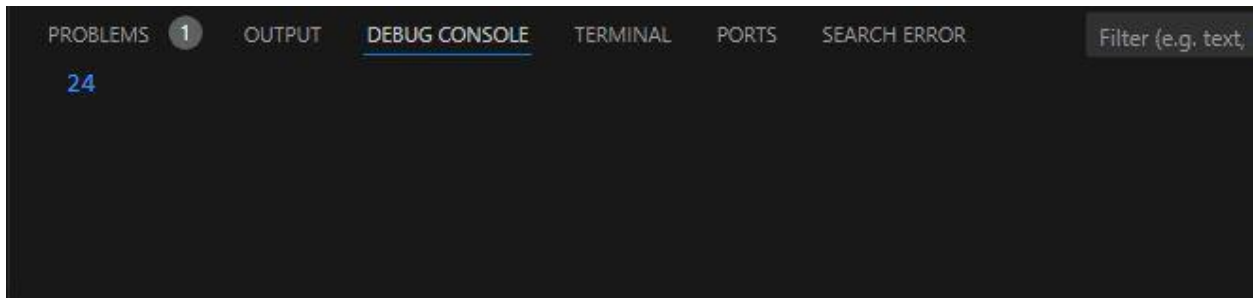
        return climb(n - 1) + climb(n - 2) + climb(n - 3);

      }

      let result = climb(6);
      console.log(result);

    </script>
  </body>
</html>
```

OUTPUT:



1.4. Task 4: Write a recursive function to flatten a nested array structure.

```
<!DOCTYPE html>
<html>
  <head>
    <title>
      My Web Page
    </title>
  </head>
  <body>
    <script>
      function flattenArray(arr) {
        let result = [];
        arr.forEach(element => {
          if (Array.isArray(element)) {
            result = result.concat(flattenArray(element));
          } else {
            result.push(element);
          }
        });

        return result;
      }
      let nestedArray = [1, [2, [3, 4], 5], [6, 7], 8];
      console.log(flattenArray(nestedArray));
    </script>
  </body>
</html>
```

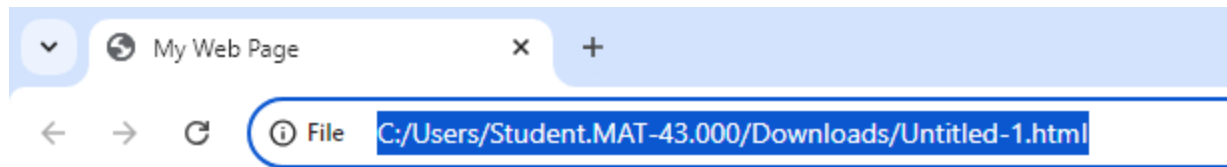
OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
> (8) [1, 2, 3, 4, 5, 6, 7, 8]
```

1.5. Task 5: Implement the recursive Tower of Hanoi solution

```
<!DOCTYPE html>
<html>
  <head>
    <title>
      My Web Page
    </title>
  </head>
  <body>
    <script>
      function towerOfHanoi(n, source, destination, auxiliary) {
        if (n === 1) {
          document.writeln(`Move disk 1 from ${source} to
${destination}`, "<br>");
          return;
        }
        towerOfHanoi(n - 1, source, auxiliary, destination);
        document.writeln(`Move disk ${n} from ${source} to ${destination}`,
"<br>");
        towerOfHanoi(n - 1, auxiliary, destination, source);
      }
      const a = 3;
      towerOfHanoi(a, 'A', 'C', 'B');
    </script>
  </body>
</html>
```

OUTPUT:

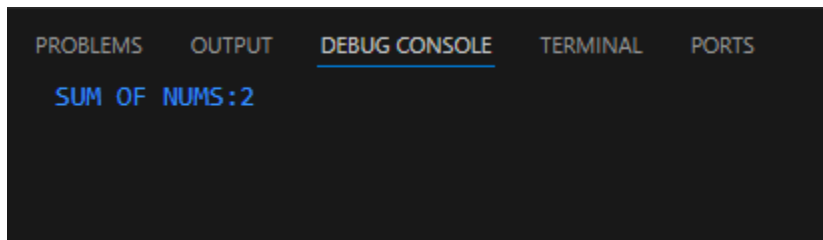


2. JSON and variable length arguments/spread syntax

2.1 Task 1: Write a function that takes an arbitrary number of arguments and returns their sum.

```
<!DOCTYPE html>
<html>
<head>
<title> document</title>
</head>
<body>
<script>
function sumAll(... args) {
let sum = 0;
for (let arg of args)
sum += arg;
return sum;
}
const numbers = [1, -2, 3];
console.log("SUM OF NUMS:"+sumAll(...numbers));
</script>
</body>
</html>
```

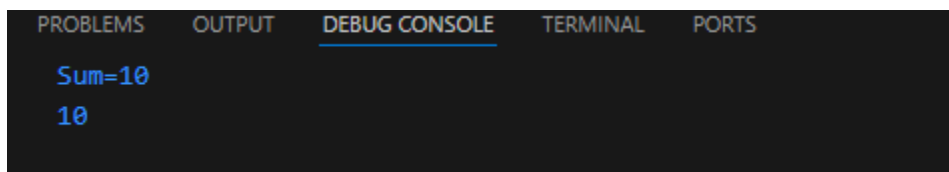
OUTPUT:



2.2 Task 2: Modify a function to accept an array of numbers and return their sum using the spread syntax.

```
<!DOCTYPE html>
<html>
<head>
<title> document</title>
</head>
<body>
<script>
function sum(w,x, y, z) {
return w + x + y + z;
}
const numbers = [1, 2, 3, 4];
console.log("Sum="+sum(...numbers));
console.log(sum.apply(null, numbers));
</script>
</body>
</html>
```

OUTPUT:



2.3 Task 3: Create a deep clone of an object using JSON methods.

```

<!DOCTYPE html>
<html >
<head>
<title>My webpage</title>
</head>
<body>
<script>
let student1 = {
name: "RAM",
company: "AMAZON"
}
let student2 = { ...student1 };
student1.name = "SITA"
console.log("student 1 name is", student1.name);
console.log("student 1 company is", student1.company);
console.log("student 2 name is ", student2.name);
console.log("student 2 company is", student2.company);
</script>
</body>
</html>

```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
		<pre> student 1 name is SITA student 1 company is AMAZON student 2 name is RAM student 2 company is AMAZON </pre>		

2.4 Task 4: Write a function that returns a new object, merging two provided objects using the spread syntax

```

<!DOCTYPE html>
<html>
<head>
<title> document</title>
</head>
<body>

```

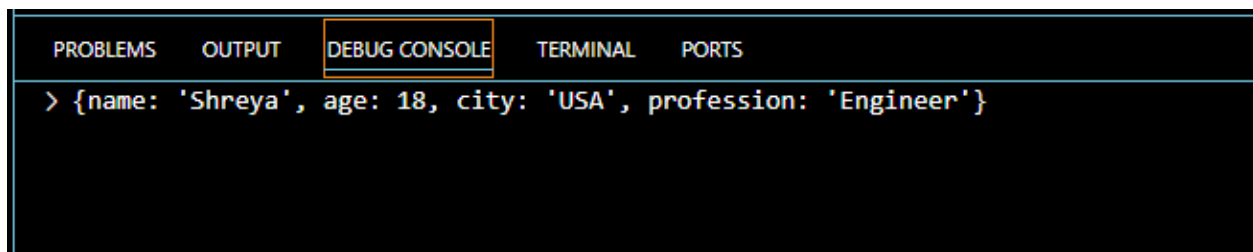


```

<script>
function mergeObj(obj1, obj2) {
return { ...obj1, ...obj2 };
}
const obj1 = { name: "Shreya", age: 18 };
const obj2 = { city: "USA", profession: "Engineer" };
const merged1 = mergeObj(obj1, obj2);
console.log(merged1);
</script>
</body>
</html>

```

OUTPUT:



2.5Task 5: Serialize a JavaScript object into a JSON string and then parse it back into an object.

```

<!DOCTYPE html>
<html>
<head>
<title> document</title>
</head>
<body>
<script>
const person = { name: "SHREYA", age: 18, city: "PARIS" };
const jsonStr= JSON.stringify(person);
console.log(jsonStr);
const parsedObj = JSON.parse(jsonStr);
console.log(parsedObj);
</script>
</body>
</html>

```

OUTPUT:

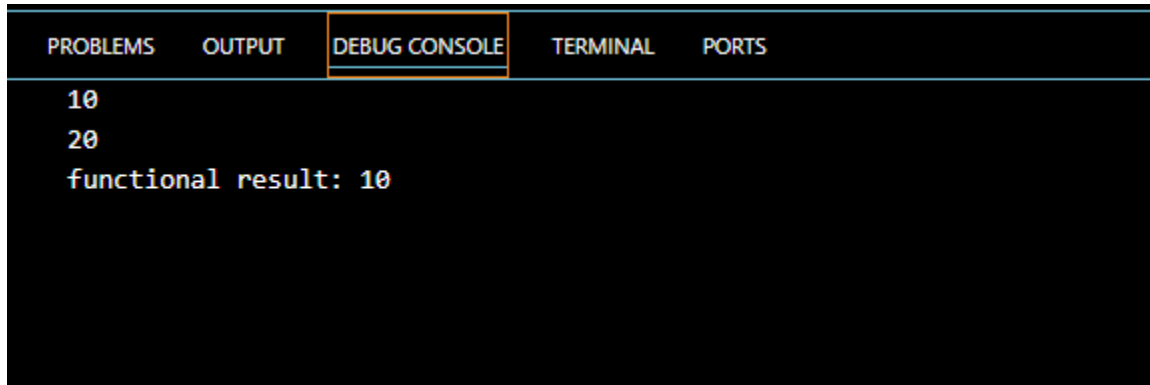
PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
<pre>{"name":"SHREYA","age":18,"city":"PARIS"} > {name: 'SHREYA', age: 18, city: 'PARIS'}</pre>				

3. Closure

3.1 Task 1: Create a function that returns another function, capturing a local variable.

```
<!DOCTYPE html>  
<html>  
  <script>  
    function fun(){  
      var a=10;  
      return a;  
    }  
    function fun1()  
    {  
      var a=fun();  
      var b=20;  
      console.log(a);  
      console.log(b);  
      var res=b-a;  
      console.log('functional result: ' + res);  
    }  
    function fun2(){  
      return fun1();  
    }  
    fun2();  
  </script>  
</html>
```

OUTPUT:



3.2Task 2: Implement a basic counter function using closure, allowing incrementing and displaying the current count.

```
<!doctype HTML>
<html>
  <head></head>
  <title>webpage</title>
  <body>
    <script>

      function createCounter(){
let count=0;
if(count==0)
console.log("Count Created");
return function(){
  count++;
  console.log("Current count: "+" "+`${count}`);
};
}
const counter=createCounter();
counter();
counter();
counter();
    </script>
  </body>
</html>
```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
<pre>Count Created Current count: 1 Current count: 2 Current count: 3</pre>				

3.3 Task 3: Write a function to create multiple counters, each with its own separate count.

```
<!DOCTYPE html>
<html>
  <title>My webpage</title>
  <body>
    <script>
      function createCount() {
let count = 0;
return {

  increment: function() {

    count++;

  },

  getCount: function() {

    return count;

  }

};

}
const counter1 = createCount();
```

```

const counter2 = createCount();

counter1.increment();

counter1.increment();

console.log(counter1.getCount());

counter2.increment();

console.log(counter2.getCount());

    </script>

</body>

</html>

```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
	2			
	1			

3.4Task 4: Use closures to create private variables within a function.

```

<!DOCTYPE html>
<html>
  <script>
    function Count(){
      let c=3;
      return {
        increment:function(){
          c++;
          return c; },
        decrement:function(){
          c--;
          return c; },

```

```

        getCount:function(){
            return c; }}
    }
    let count=Count();
    console.log(count.increment());
    console.log(count.decrement());
    console.log(count.getCount());
    console.log(count.c);
</script>
</html>

```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
	4			
	3			
	3			
	undefined			

3.5Task 5: Build a function factory that generates functions based on some input using closures.

```

<!DOCTYPE html>
<html>
  <title>My webpage</title>
  <body>
    <script>
      function factory(factor) {
        return function(number) {
          return number * factor;

        };
      }
    </script>
  </body>
</html>
const double = factory(4);

```

```

const triple = factory(6);

console.log(double(3));

console.log(triple(3));

    </script>

  </body>

</html>

```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
	12			
	18			

4. Promise, Promises chaining

4.1.Task 1: Create a new promise that resolves after a set number of seconds and returns a greeting.

```

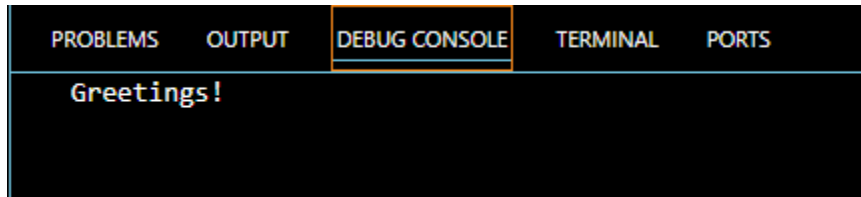
<!DOCTYPE html>
<html>
  <script>
    function myPromise(){
      return new Promise((resolve)=>{
        setTimeout(()=>{
          resolve();
          console.log("Greetings!");
        },
          3000); })
    }

    myPromise();
  </script>

```

```
</html>
```

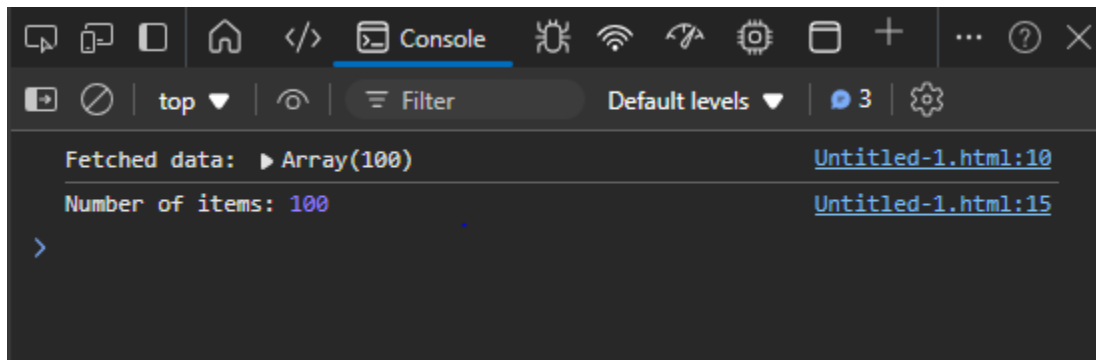
OUTPUT:



4.2. Task 2: Fetch data from an API using promises, and then chain another promise to process this data.

```
<html><head>
<title>My Webpage</title>
</head>
<body>
<script>
function fetchData(url) {
return fetch(url)
.then(response => response.json())
.then(data => {
console.log('Fetched data:', data);
return data;
})
.then(data => {
const count = data.length;
console.log('Number of items:', count);
})
.catch(error => {
console.log('Error:', error);
});
}
const apiUrl = 'https://jsonplaceholder.typicode.com/posts';
fetchData(apiUrl);
</script>
</body>
</html>
```


OUTPUT:



4.3. Task 3: Create a promise that either resolves or rejects based on a random number

```
<!DOCTYPE html>
<html>
  <script>
    var data=new Promise((resolve,reject)=>{
      setTimeout(()=>{
        var n=parseInt(prompt("Enter Number:"));
        if(n%2==0)
          resolve("It is Even");
        else
          reject("It is Odd");
      },5000);
    })
    console.log(data);
  </script>
</html>
```

OUTPUT:

```
▼ Promise {[[PromiseState]]: 'pending', [[PromiseResult]]: undefined}
  [[PromiseResult]] = 'It is Even'
  [[PromiseState]] = 'fulfilled'
  > [[Prototype]] = Promise
```

4.4. Task 4: Use Promise.all to fetch multiple resources in parallel from an API.

```
<!DOCTYPE html>
<html>
  <script>
    const urls = [
      'https://httpbin.org/get',
      'https://httpbin.org/get',
      'https://httpbin.org/get'
    ];

    Promise.all(urls.map((url)=>fetch(url).then((response)=>response.json()))).then((jsons)=>{
      jsons.forEach((json)=>console.log(json));
    })
    .catch((error)=>console.error('error occurred:',error));
  </script>
</html>
```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
		> {args: {...}, headers: {...}, origin: '103.130.90.187', url: 'https://httpbin.org/get'}		
		> {args: {...}, headers: {...}, origin: '103.130.90.187', url: 'https://httpbin.org/get'}		
		> {args: {...}, headers: {...}, origin: '103.130.90.187', url: 'https://httpbin.org/get'}		

4.5. Task 5: Chain multiple promises to perform a series of asynchronous actions in sequence.

```
<!DOCTYPE HTML>
<html>
  <head></head>
  <title>My webpage</title>
  <body>
    <script>
      function step1() {
        return new Promise((resolve) => {
          console.log("Step 1: Fetching user data...");
          setTimeout(() => resolve({ userId: 1, name: "John Doe" })), 1000);
        });
      }

      function step2(user) {
        return new Promise((resolve) => {
          console.log("Step 2: Fetching user posts...");
          setTimeout(() => resolve([ { id: 1, title: "Post 1" }, { id: 2, title: "Post
2" } ])), 1000);
        });
      }

      function step3(posts) {
        return new Promise((resolve) => {
          console.log("Step 3: Saving posts...");
          setTimeout(() => resolve(" saved successfully!"), 1000);
        });
      }

      step1()
        .then(user => {
          console.log("User data:", user);
          return step2(user);
        })
        .then(posts => {
          console.log("User's posts:", posts);
          return step3(posts);
        })
        .then(message => {
          console.log(message);
        })
        .catch(error => {
          console.error("Error:", error);
        });
    </script>
  </body>
</html>
```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
<pre>Step 1: Fetching user data... > User data: {userId: 1, name: 'John Doe'} Step 2: Fetching user posts... > User's posts: (2) [{...}, {...}] Step 3: Saving posts... saved successfully!</pre>				

5. Async/await:

5.1.Task 1: Rewrite a promise-based function using async/await.

```
<!DOCTYPE html>
<html>
  <script>
    function Place(order){
      return new Promise((resolve)=>{
        setTimeout(()=>{
          console.log(`${order} Order Placed.`);
          resolve(order);
        },1000);
      })
    }
    function Deleiver(order){
      return new Promise((resolve)=>{
        setTimeout(()=>{
          console.log(`${order} Order Delivered.`);
          resolve(`${order} Order Delivered.`);
        },3000); }) }
    async function orders(food){
      const orderss=await Place(food);
      const deliver=await Deleiver(orderss);
      document.write(status); }
  </script>
</html>
```

```
orders("BRIYANI");
orders("CURD RICE");
orders("OREO SHAKE");
orders("ICE CREAM");
</script>
</html>
```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
		BRIYANI Order Placed. CURD RICE Order Placed. OREO SHAKE Order Placed. ICE CREAM Order Placed. BRIYANI Order Delivered. CURD RICE Order Delivered. OREO SHAKE Order Delivered. ICE CREAM Order Delivered.		

5.2. Task 2: Create an async function that fetches data from an API and processes it.

```
<!DOCTYPE html>
<html>
  <script>
    function PlaceFood(order){
      return new Promise((resolve)=>{
        setTimeout(()=>{
          console.log(`${order} Order Placed.`);
          resolve(order);
        },1000);
      })
    }
    function PrepareFood(order){
      return new Promise((resolve)=>{
        setTimeout(()=>{
```

```

        console.log(`${order} Order Prepared.`);
        resolve(order);
    },1000);
    })
}
function DeleiverFood(order){
    return new Promise((resolve)=>{
        setTimeout(()=>{
            console.log(`${order} Order Delivered.`);
            resolve(`${order} Order Delivered.`);
        },1000);
    })
}
async function orders(food){
    const orderss=await PlaceFood(food);
    const Prepare=await PrepareFood(orderss);
    const deliver=await DeleiverFood(Prepare);
    document.write(status);
}
orders("BURGER");
</script>
</html>

```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
		BURGER Order Placed.		
		BURGER Order Prepared.		
		BURGER Order Delivered.		

5.3Task 3: Implement error handling in an async function using try/catch.

```

<!DOCTYPE html>

<html>

```

```
<title>TASK 5.3</title>

<body>

  <script>

async function fetchData() {

  throw new Error('URL is missing!');

}

async function fun() {

  try {

    const res = await fetchData();

    console.log('Data fetched:', res);

  } catch (error) {

    console.error('Error occurred:', error.message);

  }

}

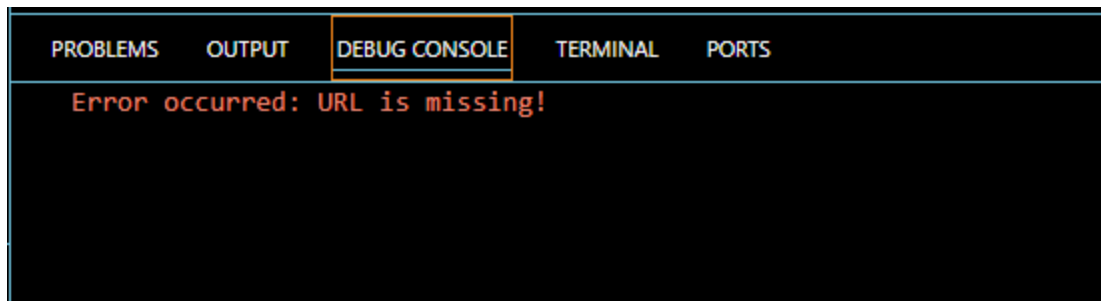
fun();

  </script>

</body>

</html>
```

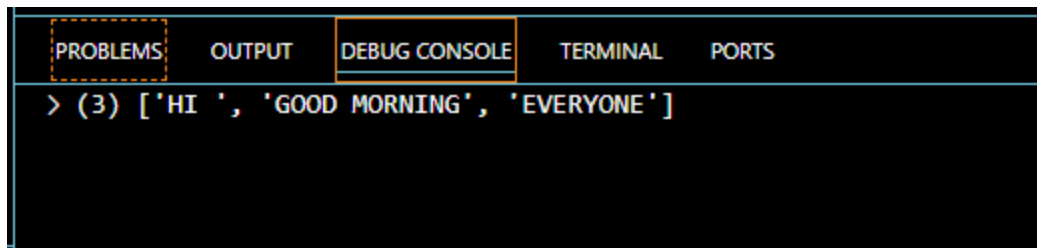
OUTPUT:



5.4 Task 4: Use async/await in combination with Promise.all.

```
<!DOCTYPE html>
<html>
  <script>
function fun1(){
  return new Promise((resolve, reject)=>{
    resolve("HI "); });
};
function fun2(){
  return new Promise((resolve, reject)=>{
    resolve("GOOD MORNING"); });
};
function fun3(){
  return new Promise((resolve, reject)=>{
    return setTimeout(()=>{
      resolve("EVERYONE");
    }, 2000); });
};
async function Execution(){
  let promise = await Promise.all([fun1(),fun2(),fun3()]);
  console.log(promise);
};
Execution();
  </script>
</html>
```

OUTPUT:



5.5Task 5: Create an async function that waits for multiple asynchronous operations to complete before proceeding.

```
<!DOCTYPE html>
<html>
  <title>TASK 5.3</title>
  <body>
    <script>
function asyncOperation(name, delay) {
  return new Promise(resolve => {
    setTimeout(() => {
      console.log(`${name} completed`);
      resolve(name);
    }, delay);
  });
}
async function main() {
  try {
    const results = await Promise.all([
      asyncOperation('Oper 1', 2000),
      asyncOperation('Oper 2', 3000)
    ]);

    console.log('ALL OPERATION COMPLETED SUCCESSFULLY:', results);
  }
  catch (error) {
    console.error('Error occurred:', error.message);
  }
}
main();
    </script>
  </body>
</html>
```

OUTPUT:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
	Oper 1 completed Oper 2 completed			
		> ALL OPERATION COMPLETED SUCCESSFULLY: (2) ['Oper 1', 'Oper 2']		

6. Modules introduction, Export and Import

6.1 Task 1: Create a module that exports a function, a class, and a variable

```
export const greeting = "Hello, World!";

// A simple function
export function greet(name) {
  return `Hello, ${name}!`;
}

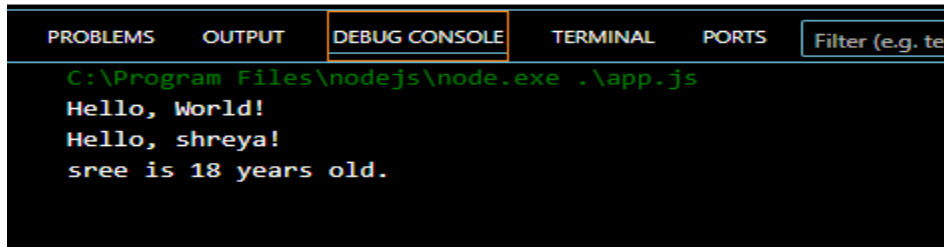
// A simple class
export class Person {
  constructor(name, age) {
    this.name = name;
    this.age = age;
  }

  getDetails() {
    return `${this.name} is ${this.age} years old.`;
  }
}

import { greeting, greet, Person } from './module.js';

console.log(greeting);
console.log(greet('shreya'));
const person = new Person('sree', 18);
console.log(person.getDetails());
```

OUTPUT:



The screenshot shows the VS Code interface with the 'DEBUG CONSOLE' tab selected. The command prompt shows the execution of a Node.js script: `C:\Program Files\nodejs\node.exe .\app.js`. The output of the script is displayed in green text: `Hello, World!`, `Hello, shreya!`, and `sree is 18 years old.`

6.2 Task 2: Import the module in another JavaScript file and use the exported entities.

```
export const greeting = "Hello, World!";

// A simple function
export function greet(name) {
  return `Hello, ${name}!`;
}

// A simple class
export class Person {
  constructor(name, age) {
    this.name = name;
    this.age = age;
  }

  getDetails() {
    return `${this.name} is ${this.age} years old.`;
  }
}

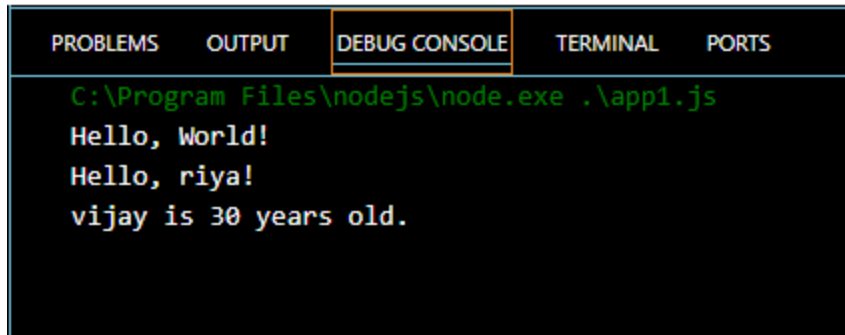
import { greeting, greet, Person } from './module1.js';

console.log(greeting);

console.log(greet('riya'));

const person = new Person('vijay', 30);
console.log(person.getDetails());
```

OUTPUT:



A screenshot of the Visual Studio Code interface, specifically the Debug Console tab. The tab is highlighted with a yellow border. The console shows the execution of a Node.js script. The command prompt is `C:\Program Files\nodejs\node.exe .\app1.js`. The output consists of three lines: `Hello, World!`, `Hello, riya!`, and `vijay is 30 years old.`

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
C:\Program Files\nodejs\node.exe .\app1.js
Hello, World!
Hello, riya!
vijay is 30 years old.
```

6.3 Task 3: Use named exports to export multiple functions from a module.

```
export function add(a, b) {
  return a + b;
}
export function subtract(a, b) {
  return a - b;
}

export function multiply(a, b) {
  return a * b;
}
export function divide(a, b) {
  if (b === 0) {
    return 'Error: Division by zero';
  }
  return a / b;
}
```

6.4 Task 4: Use named imports to import specific functions from a module.

```
import { add, subtract, multiply, divide } from './module1.js';
console.log(add(10, 20));
console.log(subtract(30,20));
console.log(multiply(10,5));
console.log(divide(10,2));
console.log(divide(10, 0));
```

OUTPUT (3,4):

*

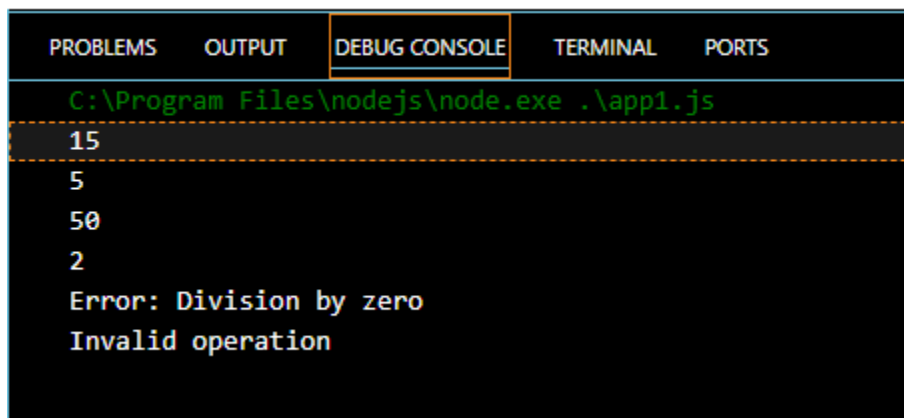
PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
<pre>C:\Program Files\nodejs\node.exe .\app1.js 30 10 50 5 Error: Division by zero</pre>				

6.5 Task 5: Use default export and import for a primary function of a module

```
export default function calculate(a, b, operation) {
  switch (operation) {
    case 'add':
      return a + b;
    case 'subtract':
      return a - b;
    case 'multiply':
      return a * b;
    case 'divide':
      if (b === 0) {
        return 'Error: Division by zero';
      }
      return a / b;
    default:
      return 'Invalid operation';
  }
}

import calculate from './module1.js';
console.log(calculate(10, 5, 'add'));
console.log(calculate(10, 5, 'subtract'));
console.log(calculate(10, 5, 'multiply'));
console.log(calculate(10, 5, 'divide'));
console.log(calculate(10, 0, 'divide'));
console.log(calculate(10, 5, 'unknown'));
```

OUTPUT:



```
C:\Program Files\nodejs\node.exe .\app1.js
15
5
50
2
Error: Division by zero
Invalid operation
```

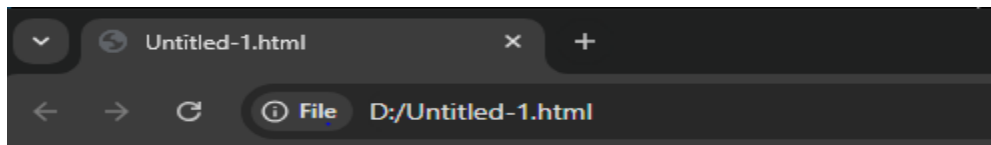
7. Browser DOM Basics

7.1 Task 1: Select an HTML element by its ID and change its content using JavaScript.

```
<!DOCTYPE html>
<html>
  <body>
    <h1>Factorial Of Number</h1>
    <form>
      <label>Enter Number:</label>
      <input type="number" id="num" name="num"><br>
      <input type="button" id="cal" value="Result" onclick="fact()">
      <p id="numb"></p>
    </form>
  </body>
  <script>
function fact(){
  var num1=parseInt(document.getElementById("num").value);
  var res=factorial(num1);
  document.getElementById("numb").innerHTML=res;
}
function factorial(num){
  if(num==0) return 1;
  else
    return factorial(num-1)*num;
}
```

```
}  
    </script>  
</html>
```

OUTPUT:



Factorial Of Number

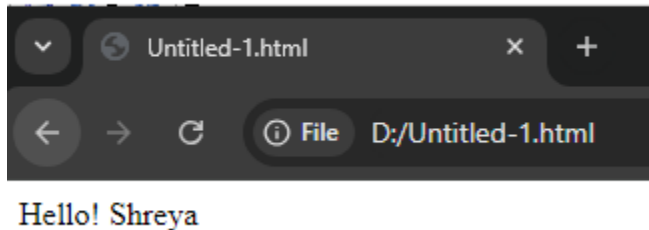
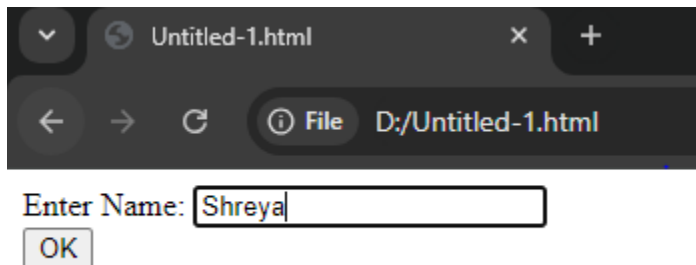
Enter Number:

720

7.2Task 2: Attach an event listener to a button, making it perform an action when clicked.

```
<!DOCTYPE html>  
<html>  
  <body>  
    <form>  
      <label>Enter Name:</label>  
      <input type="text" id="nam" name="namm"><br>  
      <input type="button" id="cal" value="OK" onclick="fun()">  
      <p id="numm"></p>  
    </form>  
  </body>  
  <script>  
function fun(){  
  
  var name=document.getElementById("nam").value;  
  document.getElementById("numm").innerHTML=document.write(`Hello! ${name}`);  
}  
  
  </script>  
</html>
```

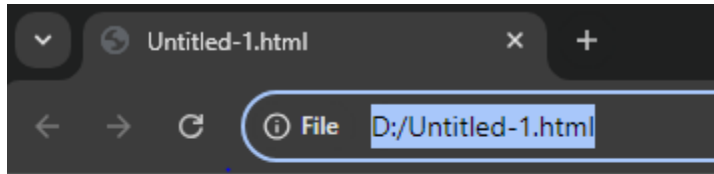
OUTPUT:



7.3Task 3: Create a new HTML element and append it to the DOM.

```
<!DOCTYPE html>
<html>
<body>
  <p>Adding HTML Element</p>
  <div id="d">
    <p id="p1">Begin</p>
    <p id="p2">End</p>
  </div>
  <script>
const a=document.createElement("p");
const node=document.createTextNode("new line");
a.appendChild(node);
const ele=document.getElementById("d");
ele.appendChild(a);
  </script>
</body>
</html>
```


OUTPUT:



Adding HTML Element

Begin

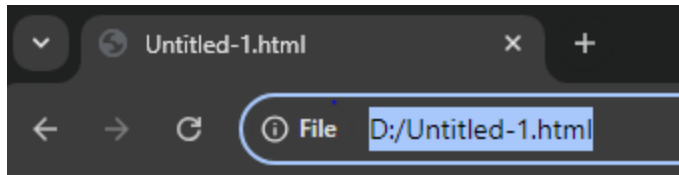
End

new line

7.4 Task 4: Implement a function to toggle the visibility of an element.

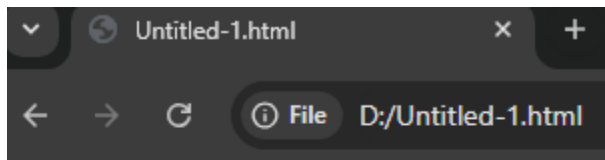
```
<!DOCTYPE html>
<html lang="en">
<body>
  <p id="m">PARIS<br></p>
  <button onclick="toggleEle()">
    Click To Toggle
  </button>
  <script>
    function toggleEle(){
      const a=document.getElementById('m');
      const vi=window.getComputedStyle(a).visibility;
      if (vi==='hidden')
        a.style.visibility='visible';
      else
        a.style.visibility='hidden';
    }
  </script>
</body>
</html>
```

OUTPUT:



PARIS

Click To Toggle

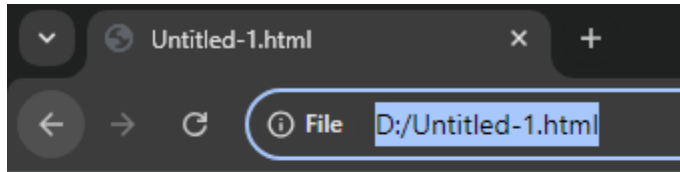


Click To Toggle

7.5Task 5: Use the DOM API to retrieve and modify the attributes of an element.

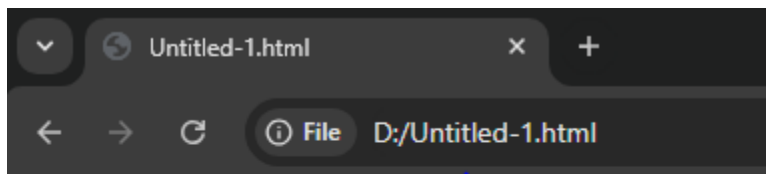
```
<!DOCTYPE html>
<html>
  <style>
    .attributee{
      color:purple;
    };
  </style>
  <h1 id="Id">Hello Folks!</h1>
  <button onclick="addAttribute()">Tap to change</button>
  <script>
    function addAttribute(){
      document.getElementById("Id").setAttribute("class","attributee");
    }
  </script>
</html>
```

OUTPUT:



Hello Folks!

Tap to change



Hello Folks!

Tap to change