Task 4

ITI

Full Stack

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Mohamed Salem Mohamed Soliman

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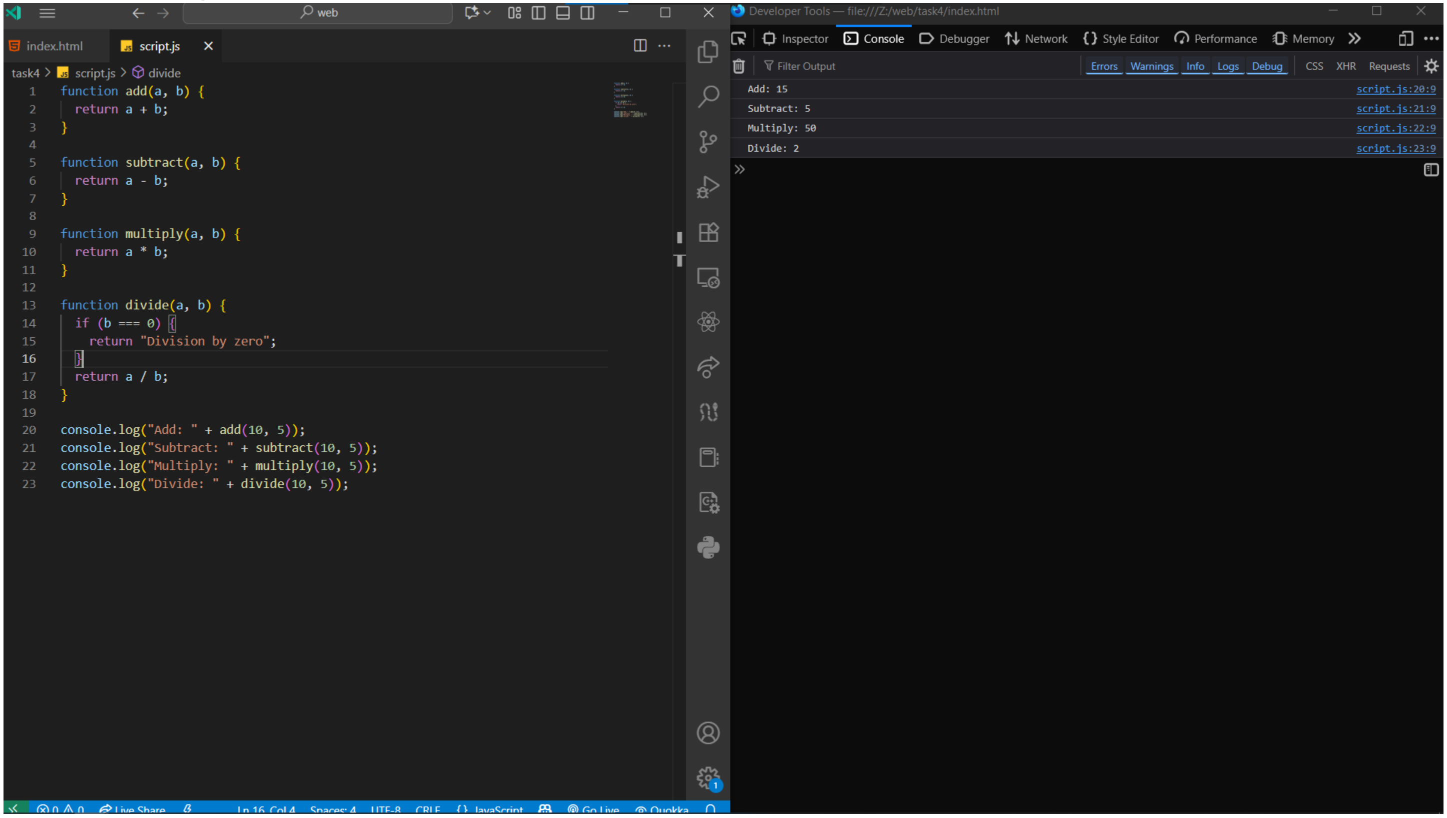
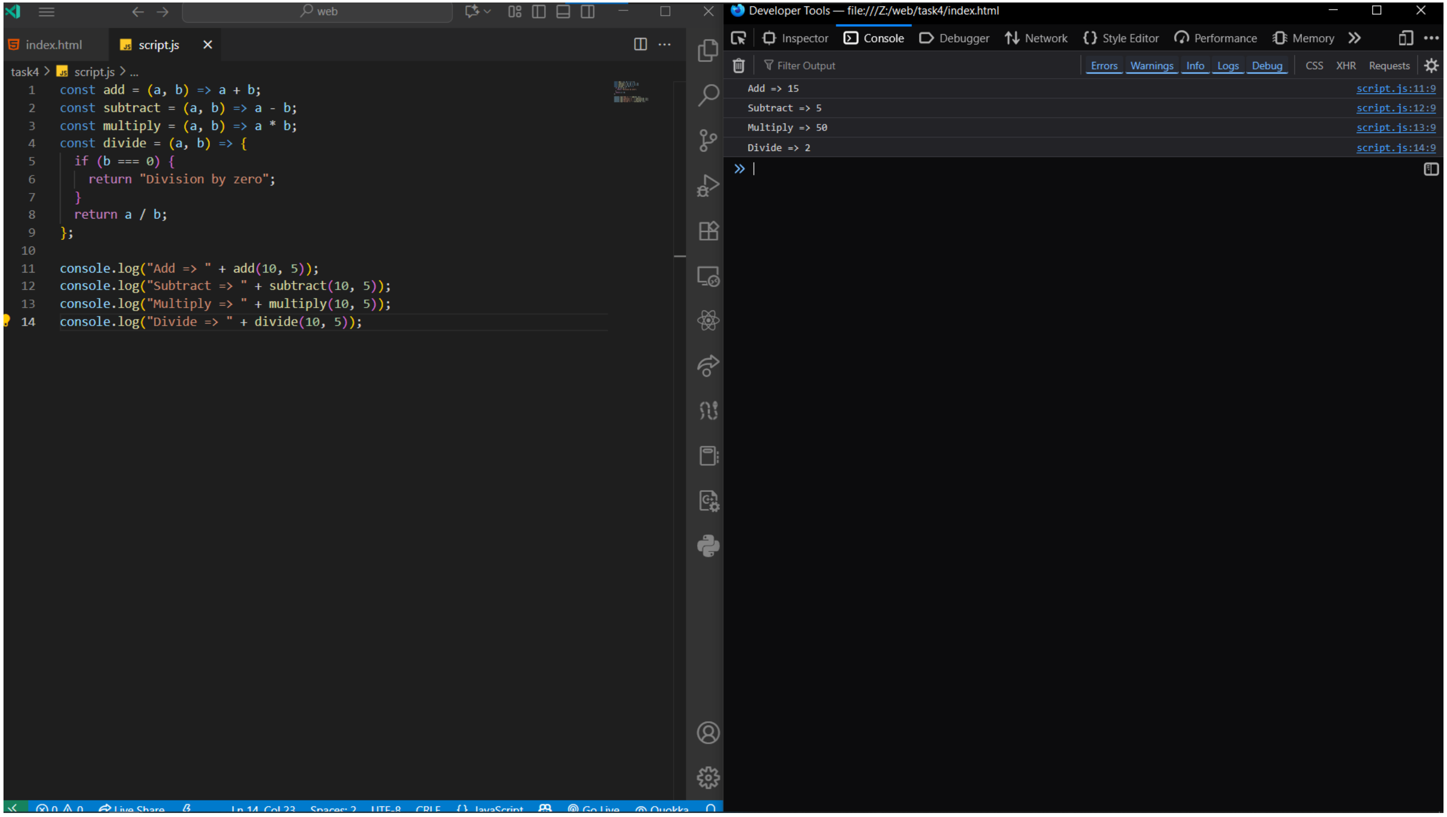
Calculator using functions



```javascript
function add(a, b) {
  return a + b;
}

function subtract(a, b) {
  return a - b;
}

function multiply(a, b) {
  return a * b;
}

function divide(a, b) {
  if (b === 0) {
    return "Division by zero";
  }
  return a / b;
}

console.log("Add: " + add(10, 5));
console.log("Subtract: " + subtract(10, 5));
console.log("Multiply: " + multiply(10, 5));
console.log("Divide: " + divide(10, 5));
```

```
Add: 15                                   script.js:20:9
Subtract: 5                               script.js:21:9
Multiply: 50                              script.js:22:9
Divide: 2                                 script.js:23:9
```

Calculator using arrow function

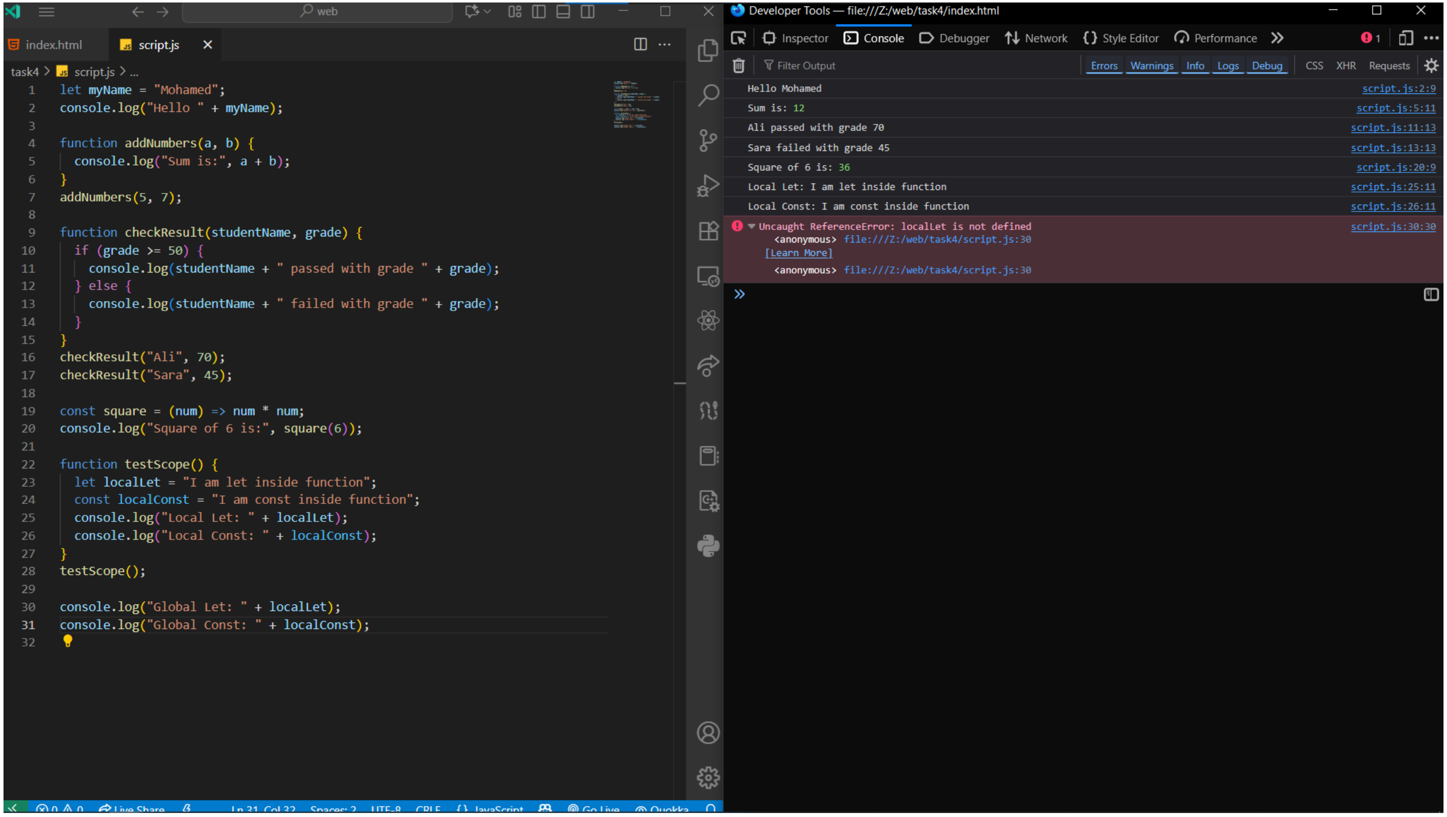


```javascript
const add = (a, b) => a + b;
const subtract = (a, b) => a - b;
const multiply = (a, b) => a * b;
const divide = (a, b) => {
  if (b === 0) {
    return "Division by zero";
  }
  return a / b;
};

console.log("Add => " + add(10, 5));
console.log("Subtract => " + subtract(10, 5));
console.log("Multiply => " + multiply(10, 5));
console.log("Divide => " + divide(10, 5));
```

```
Add => 15                                 script.js:11:9
Subtract => 5                             script.js:12:9
Multiply => 50                            script.js:13:9
Divide => 2                               script.js:14:9
```

Practice Exercises

1. Define a variable with your name and print 'Hello [name]'.
2. Create a function that takes two numbers and prints their sum.
3. Create a function that takes a student's name and grade, then prints a pass/fail message.
4. Use an arrow function to square a number.
5. Try using let/const inside a function and test access outside.



```javascript
let myName = "Mohamed";
console.log("Hello " + myName);

function addNumbers(a, b) {
  console.log("Sum is:", a + b);
}
addNumbers(5, 7);

function checkResult(studentName, grade) {
  if (grade >= 50) {
    console.log(studentName + " passed with grade " + grade);
  } else {
    console.log(studentName + " failed with grade " + grade);
  }
}
checkResult("Ali", 70);
checkResult("Sara", 45);

const square = (num) => num * num;
console.log("Square of 6 is:", square(6));

function testScope() {
  let localLet = "I am let inside function";
  const localConst = "I am const inside function";
  console.log("Local Let: " + localLet);
  console.log("Local Const: " + localConst);
}
testScope();

console.log("Global Let: " + localLet);
console.log("Global Const: " + localConst);
```

```
Hello Mohamed                                              script.js:2:9
Sum is: 12                                                 script.js:5:11
Ali passed with grade 70                                   script.js:11:13
Sara failed with grade 45                                  script.js:13:13
Square of 6 is: 36                                         script.js:20:9
Local Let: I am let inside function                        script.js:25:11
Local Const: I am const inside function                    script.js:26:11
Uncaught ReferenceError: localLet is not defined           script.js:30:30
    <anonymous> file:///Z:/web/task4/script.js:30
  [Learn More]
    <anonymous> file:///Z:/web/task4/script.js:30
```