

PROGRAM FOR CALCULATOR IN NODEJS

```
let http = require('http');

let fs = require ('fs');

let handleRequest = (request, response) => {
  response.writeHead (200, {
    'Content-Type': 'text/html'
  });
  fs.readFile('./index1.xml', null, function (error, data) {
    if (error) {
      response.writeHead (404);
      response.write('file not found');
    } else {
      response.write(data);
    }
    response.end();
  });
};

const argvs = process.argv
const argv = argvs.slice(2)
const operation = argv[0]
const operator1 = parseInt(argv[1])
const operator2 = parseInt(argv[2])

if (operation === 'add') {
  console.log(operation + ' is '+ (operator1 + operator2));
}

if (operation === 'subtract') {
  console.log(operation + ' is '+ (operator1 - operator2));
}

if (operation === 'multiply') {
  console.log(operation + ' is '+ (operator1 * operator2));
}
```

```

if (operation === 'divide') {

    console.log(operation + ' is '+ (operator1 / operator2));

}

http.createServer (handleRequest).listen(7000);

```

The screenshot shows a web browser window at the top with the URL `labs.alchemycloud.co.in/Citrix/StoreWeb/clients/HTML5Client/src/SessionWindow.html?launchid=1691316861718#launchurl=Resources%2FLaunchica%2FQxSLUIOREIBUNvbGFJZSAkQTQ4O...`. Below the browser is a code editor window titled `C:\nodecode\calc.js - Notepad++`. The code in the editor is as follows:

```

1 let http = require('http');
2 let fs = require('fs');
3 let handleRequest = (request, response) => {
4     response.writeHead(200, {
5         'Content-Type': 'text/html'
6     });
7     fs.readFile('./index1.xml', null, function (error, data) {
8         if (error) {
9             response.writeHead(404);
10            response.write('file not found');
11        } else {
12            response.write(data);
13        }
14        response.end();
15    });
16 };
17 const argvs = process.argv
18 const argv = argvs.slice(2)
19 const operation = argv[0]
20 const operator1 = parseInt(argv[1])
21 const operator2 = parseInt(argv[2])
22 if (operation === 'add') {
23     console.log(operation + ' is '
24         + (operator1 + operator2));
25 }
26 if (operation === 'subtract') {
27     console.log(operation + ' is '
28         + (operator1 - operator2));
29 }
30 if (operation === 'multiply') {
31     console.log(operation + ' is '
32         + (operator1 * operator2));
33 }

```

The status bar at the bottom of the code editor shows `JavaScript file`, `length: 1,030 lines: 39`, `Ln: 16 Col: 4 Pos: 394`, `Windows (CR LF)`, `UTF-8`, and `INS`. The Windows taskbar at the very bottom shows the date and time as `04:26 PM 06-08-2023`.

XML PROGRAM

```

<xml>

<title>Dummy Calculator</title>

<body>program successful</body>

</xml>

```

The screenshot shows a code editor window titled `C:\nodecode\index1.xml - Notepad++`. The code in the editor is as follows:

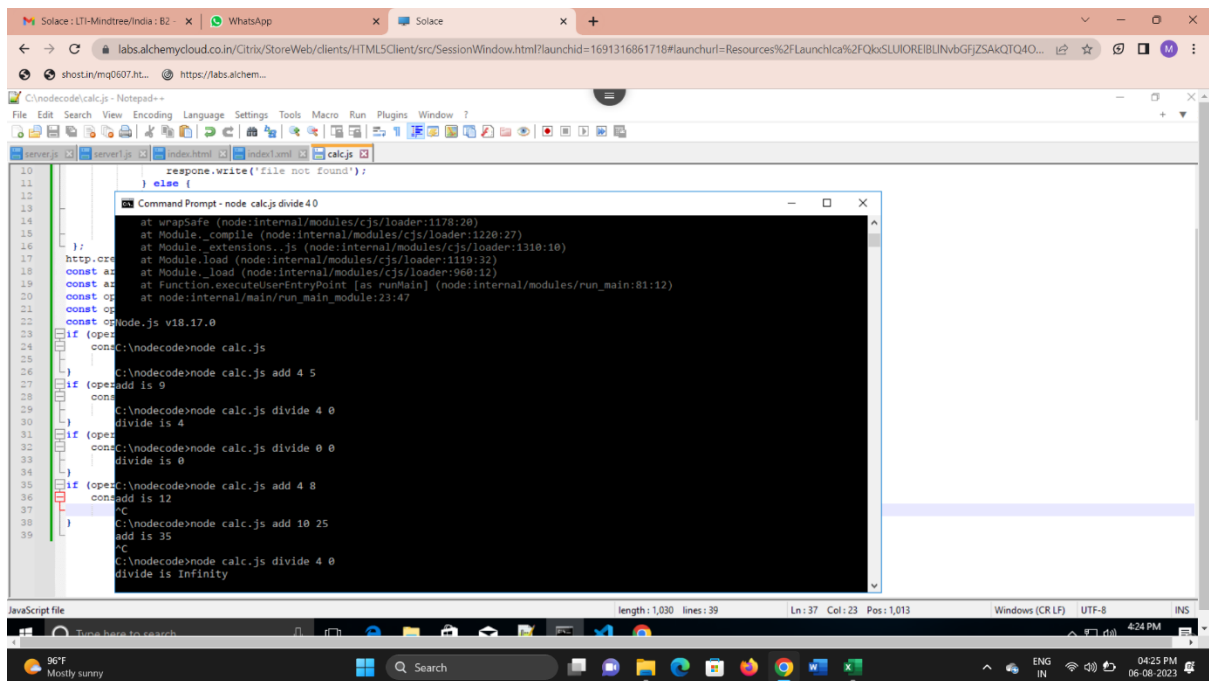
```

1 <xml>
2 <title>Dummy Calculator</title>
3 <body>program successful</body>
4 </xml>

```

The status bar at the bottom of the code editor shows `eXtensible Markup Language file`, `length: 80 lines: 4`, `Ln: 4 Col: 1 Pos: 74`, `Windows (CR LF)`, `UTF-8`, and `INS`. The Windows taskbar at the very bottom shows the date and time as `04:26 PM 06-08-2023`.

TERMINAL



The screenshot shows a Solace IDE window with a terminal pane. The terminal displays the output of a Node.js script. The script defines a function `calc` that takes two arguments, `a` and `b`, and returns the result of `a/b`. The script is executed with the command `node calc.js divide 4 0`. The output shows the function being called with `a=4` and `b=0`, and the result being `Infinity`.

```
at wrapSafe (node:internal/modules/cjs/loader:1178:20)
at Module._compile (node:internal/modules/cjs/loader:1228:27)
at Module._extensions..js (node:internal/modules/cjs/loader:1310:10)
at Module.load (node:internal/modules/cjs/loader:1119:32)
at Module._load (node:internal/modules/cjs/loader:968:12)
at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:81:12)
at node:internal/main/run_main_module:23:47
const op = 'divide'
const opNode = 'node.js v18.17.0'
if (op === 'add') {
  const C = 'C:\\nodecode\\node calc.js'
  C:\\nodecode\\node calc.js add 4 5
  add is 9
} else if (op === 'divide') {
  const C = 'C:\\nodecode\\node calc.js divide 4 0'
  divide is 4
} else if (op === 'divide 0 0') {
  const C = 'C:\\nodecode\\node calc.js divide 0 0'
  divide is 0
} else if (op === 'add 4 8') {
  const C = 'C:\\nodecode\\node calc.js add 4 8'
  add is 12
} else if (op === 'add 10 25') {
  const C = 'C:\\nodecode\\node calc.js add 10 25'
  add is 35
} else if (op === 'divide 4 0') {
  const C = 'C:\\nodecode\\node calc.js divide 4 0'
  divide is Infinity
}
```

BROWSER

