

This screenshot shows the first execution of the 'task2.js' file in VS Code. The Explorer sidebar on the left displays a project structure with folders 'KARKA', 'day1\practice', 'day2\practice', 'day3\practice', and 'day4', each containing various JavaScript files. The 'task2.js' file is selected and its code is visible in the editor. The code includes comments for tasks 1 through 4, with task 1 implementing a 'sayhello' function and task 2 implementing an 'add' function. The terminal at the bottom shows the command 'node task2' being executed, resulting in the output 'Hello, World!'. The terminal also displays the Node.js version 'v22.16.0' and the current directory 'D:\karka\day2\practice'.

```
day2 > practice > JS task2.js > ...
1 // task1
2 function sayhello(){
3   console.log("Hello, World!" )
4 }
5 sayhello()
6
7 // task2
8 // function add(a,b){
9   console.log(a+b)
10 // }
11 // add(10,10)
12
13 // task3
14 // function mul(x,y){
15 //   let c = x*y
16 //   return c
17 // }
18 // total = mul(10,10)
19 // console.log(total)
20
21 //task4
22 // function mul(a,b){
23 // console.log(a*b)
24 // }
```

Node.js v22.16.0
PS D:\karka\day2\practice> node task2
Hello, World!
PS D:\karka\day2\practice>

This screenshot shows the second execution of the 'task2.js' file in VS Code. The Explorer sidebar and the code in the editor are identical to the first screenshot. The terminal at the bottom shows the command 'node task2' being executed again, resulting in the output 'Hello, World!'. The terminal also displays the Node.js version 'v22.16.0' and the current directory 'D:\karka\day2\practice'.

```
day2 > practice > JS task2.js > ...
1 // task1
2 // function sayhello(){
3 //   console.log("Hello, World!" )
4 // }
5 // sayhello()
6
7 // task2
8 function add(a,b){
9   console.log(a+b)
10 }
11 add(10,10)
12
13 // task3
14 // function mul(x,y){
15 //   let c = x*y
16 //   return c
17 // }
18 // total = mul(10,10)
19 // console.log(total)
20
21 //task4
22 // function mul(a,b){
23 // console.log(a*b)
24 // }
```

Node.js v22.16.0
PS D:\karka\day2\practice> node task2
Hello, World!
PS D:\karka\day2\practice> node task2
20
PS D:\karka\day2\practice>

```
day2 > practice > JS task2.js > mul
3 // console.log("Hello, World!" )
4 // }
5 // sayhello()
6
7 // task2
8 // function add(a,b){
9 //   console.log(a+b)
10 // }
11 // add(10,10)
12
13 // task3
14 function mul(x,y){
15   let c = x*y
16   return c
17 }
18 total = mul(10,10)
19 console.log(total)
20
21 //task4
22 // function mul(a,b){
23 //   console.log(a*b)
24 // }
25 // mul(10,10)
26
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

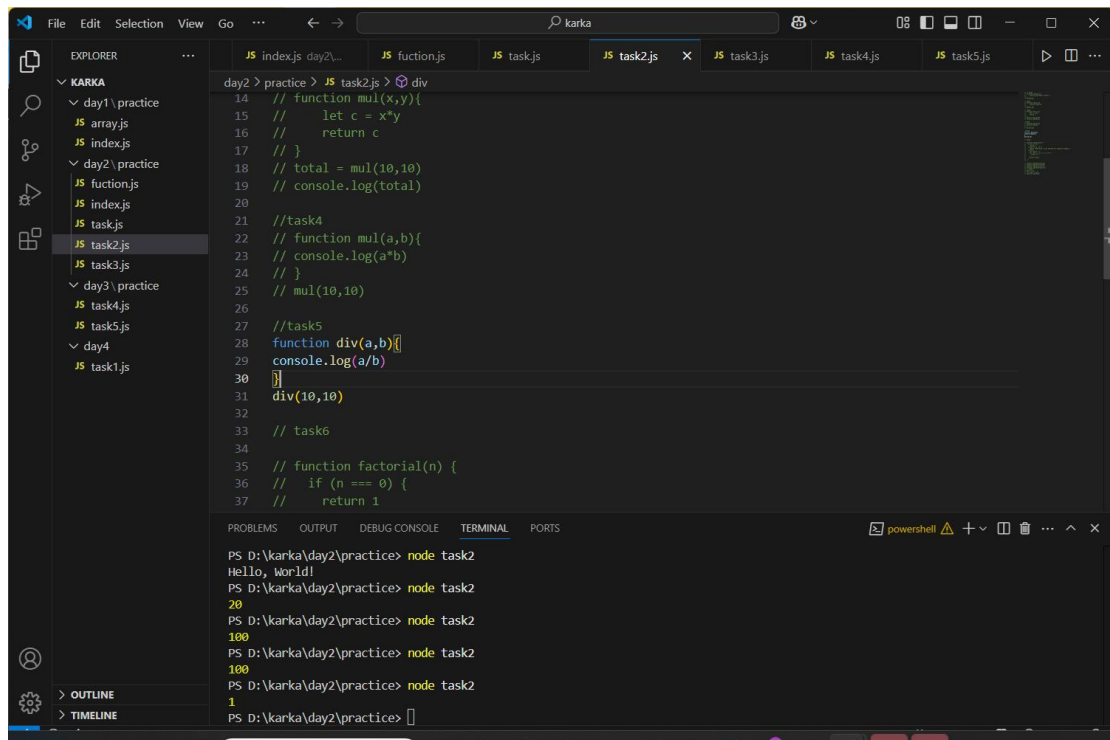
at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:171:5)
at node:internal/main/run_main_module:36:49

Node.js v22.16.0
PS D:\karka\day2\practice> node task2
Hello, World!
PS D:\karka\day2\practice> node task2
20
PS D:\karka\day2\practice> node task2
100
PS D:\karka\day2\practice>

```
day2 > practice > JS task2.js > mul
9 // console.log(a+b)
10 // }
11 // add(10,10)
12
13 // task3
14 // function mul(x,y){
15 //   let c = x*y
16 //   return c
17 // }
18 // total = mul(10,10)
19 // console.log(total)
20
21 //task4
22 function mul(a,b){
23   console.log(a*b)
24 }
25 mul(10,10)
26
27 //task5
28 // function div(a,b){
29 //   console.log(a/b)
30 // }
31 // div(10,10)
32
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Node.js v22.16.0
PS D:\karka\day2\practice> node task2
Hello, World!
PS D:\karka\day2\practice> node task2
20
PS D:\karka\day2\practice> node task2
100
PS D:\karka\day2\practice>



VS Code editor showing a JavaScript file named `task2.js` in the `day2 > practice > JS task2.js` directory. The code defines a `factorial` function:

```
24 // }
25 // mul(10,10)
26
27 //task5
28 // function div(a,b){
29 // console.log(a/b)
30 // }
31 // div(10,10)
32
33 // task6
34
35 function factorial(n) {
36   if (n === 0) {
37     return 1
38   } else if (n < 0) {
39     return "Factorial is not defined for negative numbers";
40   } else {
41     let result = 1
42     for (let i = 1; i <= n; i++) {
43       result *= i
44     }
45     return result
46   }
47 }
```

The terminal output shows the command `node task2` being executed, resulting in the output `120`.

VS Code editor showing the same JavaScript file `task2.js`. The code now includes additional logic for task 7:

```
42 // console.log(factorial(5))
43 // console.log(factorial(0))
44 // console.log(factorial(3))
45 // console.log(factorial(-2))
46 // task7
47
48 let a = 20
49 let total = a**2
50 console.log(total)
```

The terminal output shows the command `node task2` being executed, resulting in the output `400`.