

The screenshot shows a code editor interface with a dark theme. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, Help, and a search bar labeled 'Task 1'. The left sidebar has sections for EXPLORER, OPEN EDITORS (listing hosting.js, memory.js, debugTask.js), TASK 1 (listing task1, debugTask.js, hosting.js, memory.js), OUTLINE, and TIMELINE.

The main editor area displays the following code:

```
1 //Task: write 10 examples demonstrating hoisting diff
2
3 //#eg1
4 console.log(a);
5 var a = 10; //var is hoisted but initialized with undefined value
6
7 // //#eg2
8 console.log(b); // let cannot access b value before initialization
9 let b = 20; //temporal Dead Zone
10
11 // //#eg3
12 console.log(c); //const cannot access c value before initialization
13 const c=30; //temporal Dead Zone
14
15 // //#eg4
16 hello(); //functions declarations can be called before they are defined due to hoisting
17 function hello(){
18     console.log("hello"); //hello
19 }
20
21 // //#eg5
22 sayHi(); //sayHi runs as undefined but you cannot call undefined as a function so its thrown
23 var sayHi = function (){
24     console.log("hi");
25 };
26
27 //eg6:
28 sayHey(); //function expression assigned to let so cannot access before defined so its shown
29 let sayHey = function (){
30     console.log("hey"); //temporal Dead Zone
31 }
32
33 //eg7:
```

A right-hand sidebar titled 'Build with Agent' contains the message 'Build with Agent' and 'AI responses may be inaccurate. Generate Agent Instructions to onboard AI onto your codebase.' Below this are 'SUGGESTED ACTIONS' buttons for 'Build Workspace' and 'Show Config', and a link to 'Activate Windows'. The status bar at the bottom shows 'In 38 Col 1 Spaces 4 UTF-8 CR/LF' and 'Port : 5500 Prettier'.

A screenshot of the Microsoft Visual Studio Code (VS Code) interface. The main area shows a code editor with several tabs open, including `hosting.js`, `memory.js`, and `debugTask.js`. The `hosting.js` tab is active and displays the following code:

```
31 }
32
33 //#eg7:
34 sayHy(); //function expression assigned to const so cannot access before defined so its sho
35 const sayHy = function (){
36     console.log("hy");
37 }
38
39 //#eg8
40 arrow(); //arrow function assigned with var are hoisted as undefined
41 var arrow = () =>{
42     console.log("Arrow func");// so calling them before assign they throw type error
43 }//var is hoisted but not a function
44
45 //eg9
46 const obj = new Person(); //the code throw error because javascript classes are not hoisted
47 class Person{ //so person cannot be used before declaration
48     constructor(){
49         console.log("person created")
50     }
51 }
52
53 //#eg10
54 var x = 5; // x are hoisted at the top of the function and shadows global x, so its when c
55 function test(){
56     console.log(x);
57 }
58 test();
59
60
61
```

The right side of the interface includes a "Build with Agent" panel, which contains a message about AI responses being inaccurate and a link to generate agent instructions. It also has buttons for "Build Workspace" and "Show Config". Below this is a "SUGGESTED ACTIONS" section with a button to activate Windows Build next. The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray.

The screenshot shows a code editor interface with a dark theme. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, Help, and a search bar labeled 'Task 1'. The left sidebar has icons for Explorer, Open Editors, Task 1, Outline, and Timeline. The main editor area displays a JavaScript file named 'memory.js' with the following content:

```
//memory visualization
//primitive data created in stack area
let person1 = {
    name: "priyanka",
    age: 24
};

let person2 = person1; //person2 now points to the same object as person1
person2.age=25;

console.log(person1); // printing person2 age because object is shared
console.log(person2);

console.log(person1==person2); // (==) check strict equality reference type
//this task shows that changes made through one variable are reflected to another they have same memory address
```

To the right of the editor, there is a 'Build with Agent' section with a button to 'Generate Agent Instructions'.

SUGGESTED ACTIONS

- Build Workspace
- Show Config

Activate Windows Build next

Go to settings Agent to AutoStart Windows

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File Edit Selection View Go Run Terminal Help ⏪ ⏩ Task 1

EXPLORER

OPEN EDITORS

- JS hosting.js
- JS memory.js
- JS debugTask.js

TASK 1

task1

JS debugTask.js

JS hosting.js

JS memory.js

SUGGESTED ACTIONS

Build Workspace Show Config

Activate Agent to AutoSave to Windows

AI responses may be inaccurate.

Generate Agent Instructions to onboard AI onto your codebase.

```
function startProcess(){
  console.log("process started");
  start1();
}

function start1(){
  console.log("start1 executed");
  start2();
}

function start2(){
  console.log("start2 executed");
  console.trace("trace step2"); //prints call stack showing execution context transisitions
}
startProcess(); //startProcess()->start1()->start2()
//console.trace() helps to print the stack helping debug flow
```

Type here to search

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