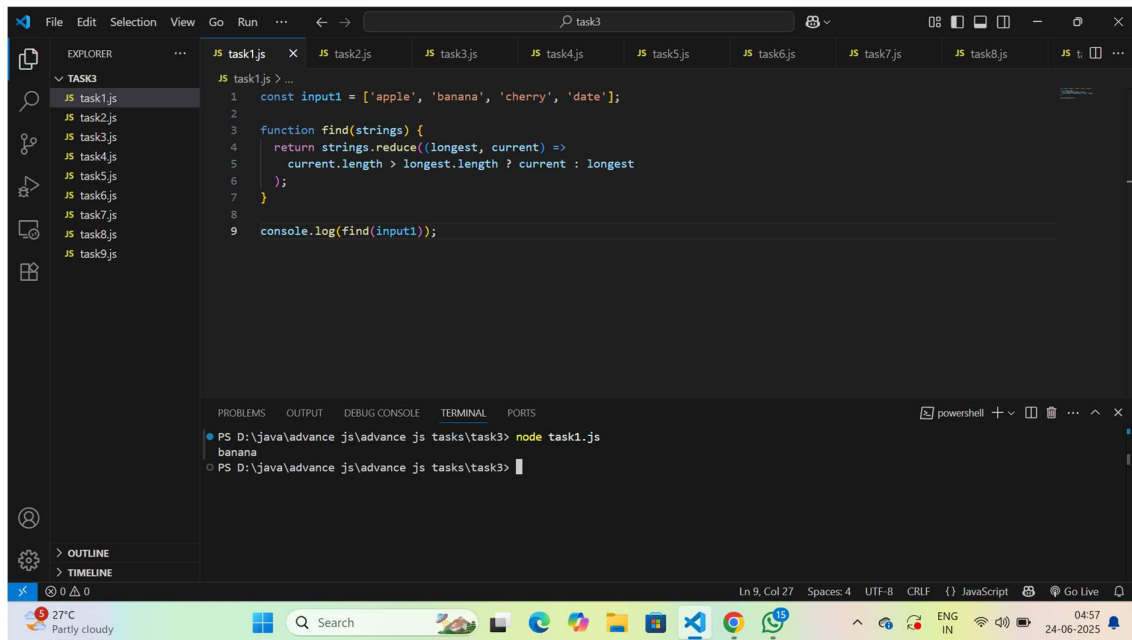


Q1;



The screenshot shows the Visual Studio Code editor with a file explorer on the left containing a folder named 'TASK3' with files task1.js through task9.js. The main editor window displays 'task1.js' with the following code:

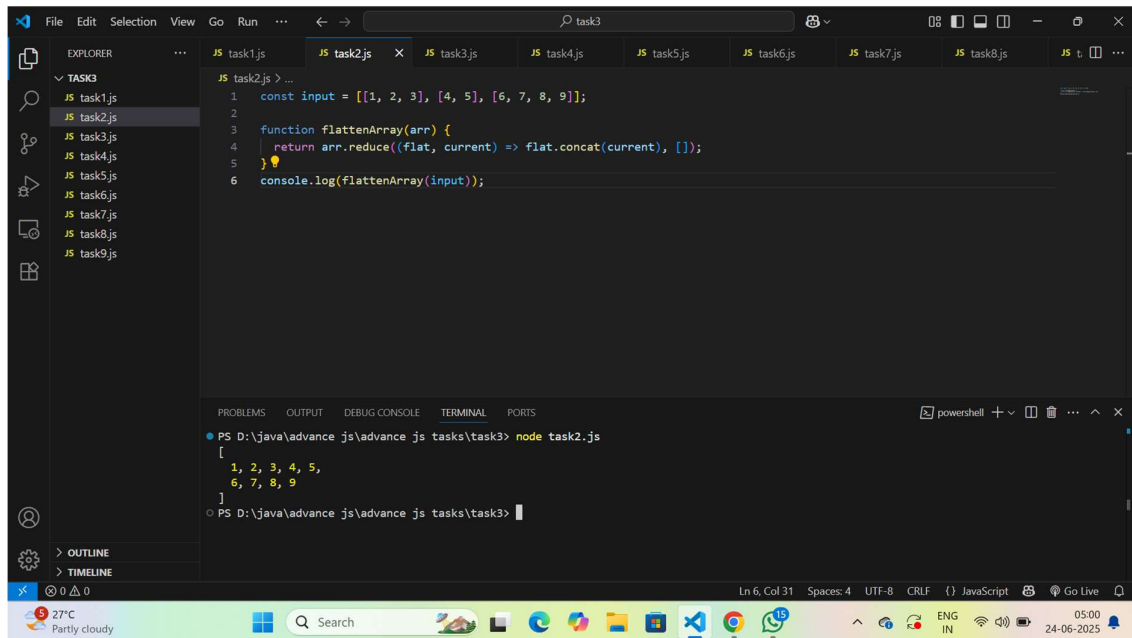
```
1 const input1 = ['apple', 'banana', 'cherry', 'date'];
2
3 function find(strings) {
4   return strings.reduce((longest, current) =>
5     current.length > longest.length ? current : longest
6   );
7 }
8
9 console.log(find(input1));
```

The bottom panel shows the 'TERMINAL' tab with the following output:

```
PS D:\java\advance js\advance js tasks\task3> node task1.js
banana
PS D:\java\advance js\advance js tasks\task3>
```

The status bar at the bottom indicates 'Ln 9, Col 27', 'Spaces: 4', 'UTF-8', 'CRLF', 'JavaScript', and the time '04:57' on '24-06-2025'.

Q2;



The screenshot shows the Visual Studio Code editor with the same file explorer as the first image. The main editor window displays 'task2.js' with the following code:

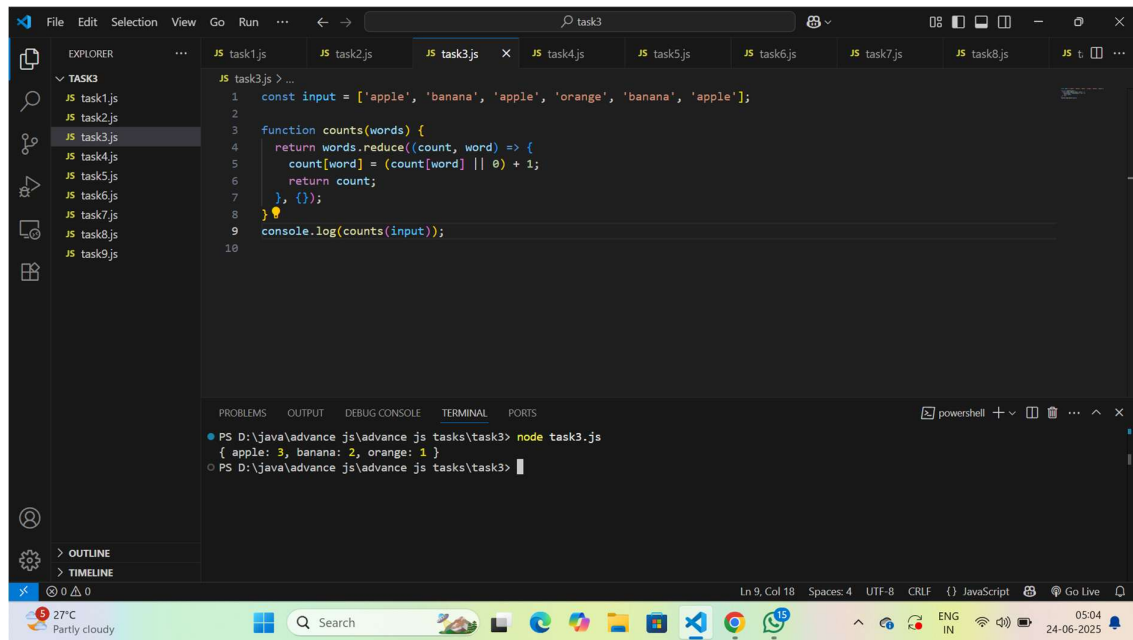
```
1 const input = [[1, 2, 3], [4, 5], [6, 7, 8, 9]];
2
3 function flattenArray(arr) {
4   return arr.reduce((flat, current) => flat.concat(current), []);
5 }
6 console.log(flattenArray(input));
```

The bottom panel shows the 'TERMINAL' tab with the following output:

```
PS D:\java\advance js\advance js tasks\task3> node task2.js
[
  1, 2, 3, 4, 5,
  6, 7, 8, 9
]
```

The status bar at the bottom indicates 'Ln 6, Col 31', 'Spaces: 4', 'UTF-8', 'CRLF', 'JavaScript', and the time '05:00' on '24-06-2025'.

Q3;



The screenshot shows the VS Code editor with a file explorer on the left containing a folder named 'TASK3' with files task1.js through task9.js. The main editor displays 'task3.js' with the following code:

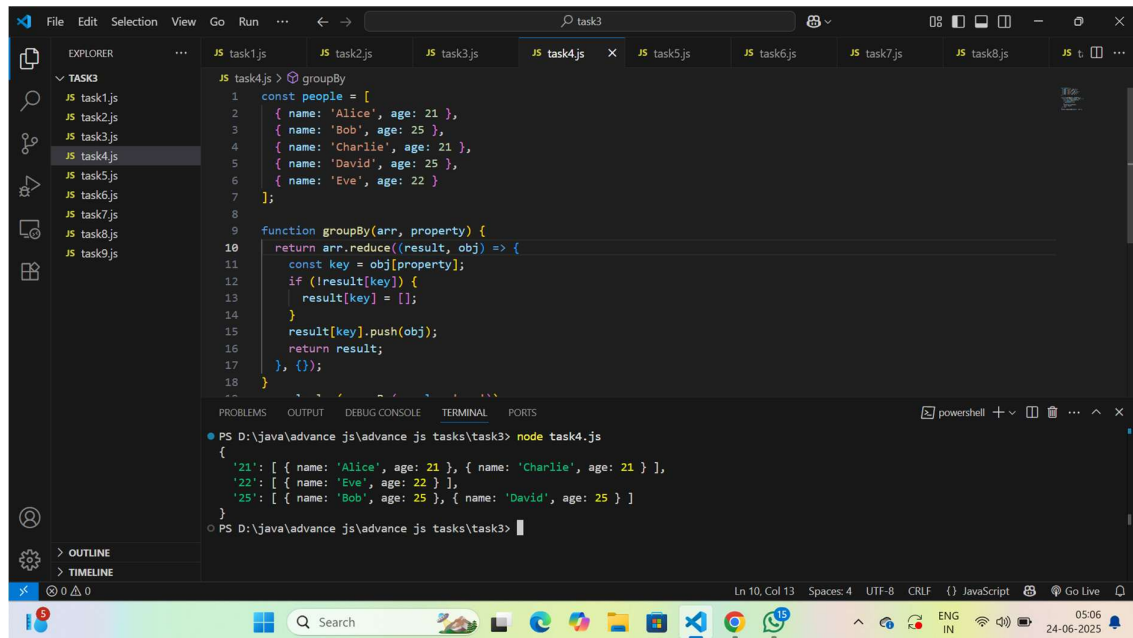
```
1 const input = ['apple', 'banana', 'apple', 'orange', 'banana', 'apple'];
2
3 function counts(words) {
4   return words.reduce((count, word) => {
5     count[word] = (count[word] || 0) + 1;
6     return count;
7   }, {});
8 }
9 console.log(counts(input));
10
```

The bottom panel shows the 'TERMINAL' output:

```
PS D:\java\advance js\advance js tasks\task3> node task3.js
{ apple: 3, banana: 2, orange: 1 }
PS D:\java\advance js\advance js tasks\task3>
```

The status bar at the bottom indicates 'Ln 9, Col 18', 'Spaces: 4', 'UTF-8', 'CRLF', 'JavaScript', and the system clock shows '05:04 24-06-2025'.

Q4;



The screenshot shows the VS Code editor with the same file explorer. The main editor displays 'task4.js' with the following code:

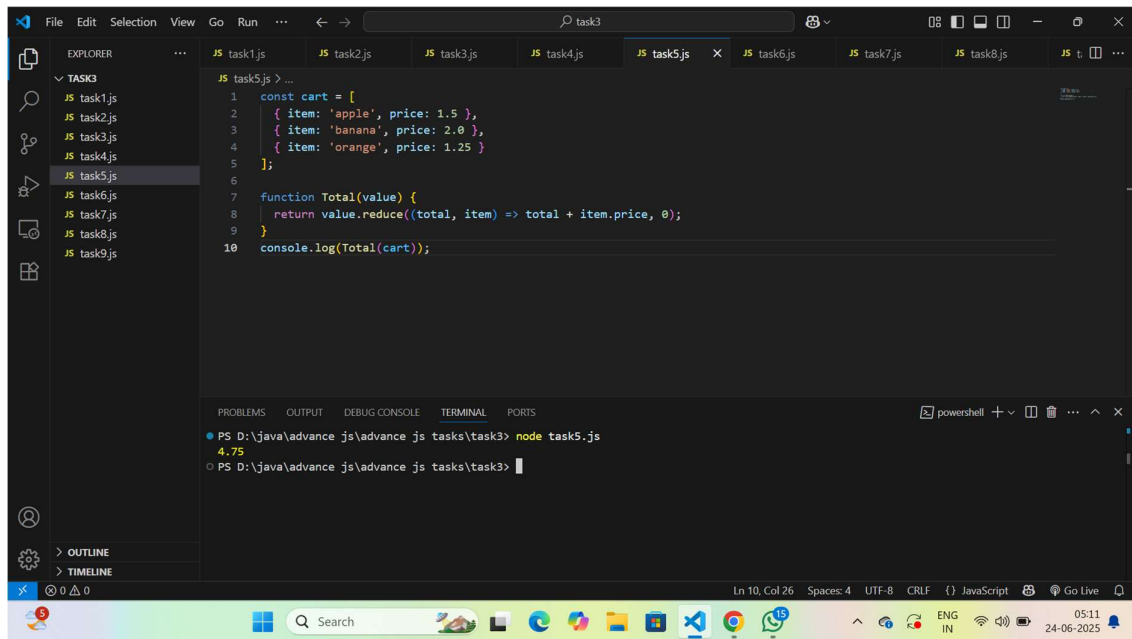
```
1 const people = [
2   { name: 'Alice', age: 21 },
3   { name: 'Bob', age: 25 },
4   { name: 'Charlie', age: 21 },
5   { name: 'David', age: 25 },
6   { name: 'Eve', age: 22 }
7 ];
8
9 function groupBy(arr, property) {
10  return arr.reduce((result, obj) => {
11    const key = obj[property];
12    if (!result[key]) {
13      result[key] = [];
14    }
15    result[key].push(obj);
16    return result;
17  }, {});
18 }
19
```

The bottom panel shows the 'TERMINAL' output:

```
PS D:\java\advance js\advance js tasks\task3> node task4.js
{
  '21': [ { name: 'Alice', age: 21 }, { name: 'Charlie', age: 21 } ],
  '22': [ { name: 'Eve', age: 22 } ],
  '25': [ { name: 'Bob', age: 25 }, { name: 'David', age: 25 } ]
}
PS D:\java\advance js\advance js tasks\task3>
```

The status bar at the bottom indicates 'Ln 10, Col 13', 'Spaces: 4', 'UTF-8', 'CRLF', 'JavaScript', and the system clock shows '05:06 24-06-2025'.

Q5;

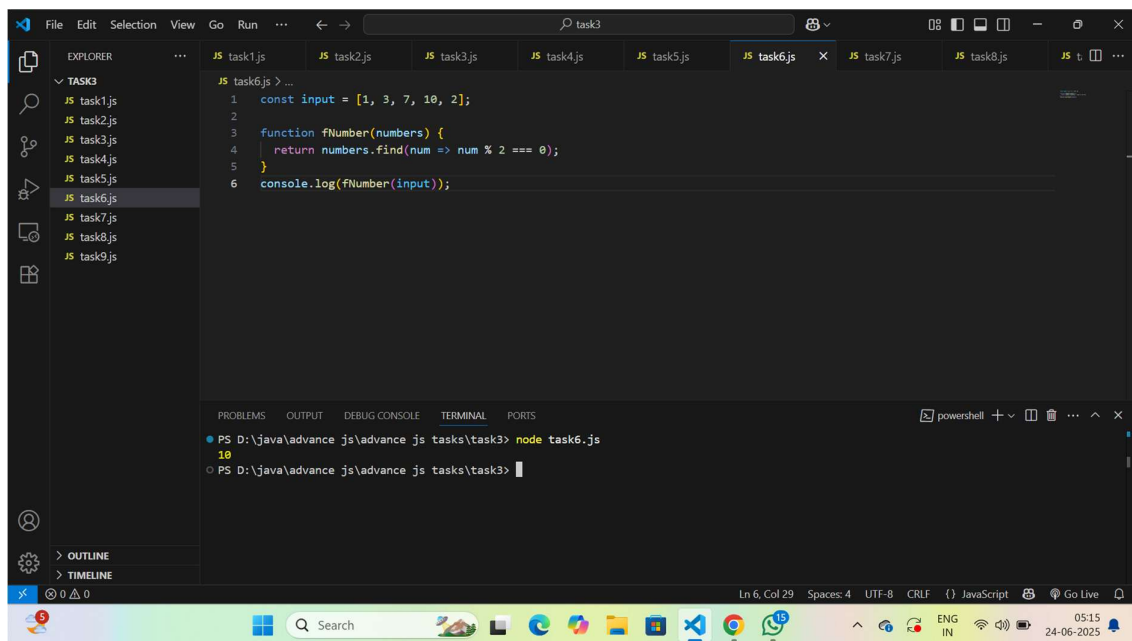


The screenshot shows the Visual Studio Code editor with a file explorer on the left containing a folder named 'TASK3' with files task1.js through task9.js. The main editor displays 'task5.js' with the following code:

```
1 const cart = [
2   { item: 'apple', price: 1.5 },
3   { item: 'banana', price: 2.0 },
4   { item: 'orange', price: 1.25 }
5 ];
6
7 function Total(value) {
8   return value.reduce((total, item) => total + item.price, 0);
9 }
10 console.log(Total(cart));
```

The bottom panel shows the 'TERMINAL' with the command `node task5.js` executed, resulting in the output `4.75`. The status bar at the bottom indicates 'Ln 10, Col 26'.

Q6;

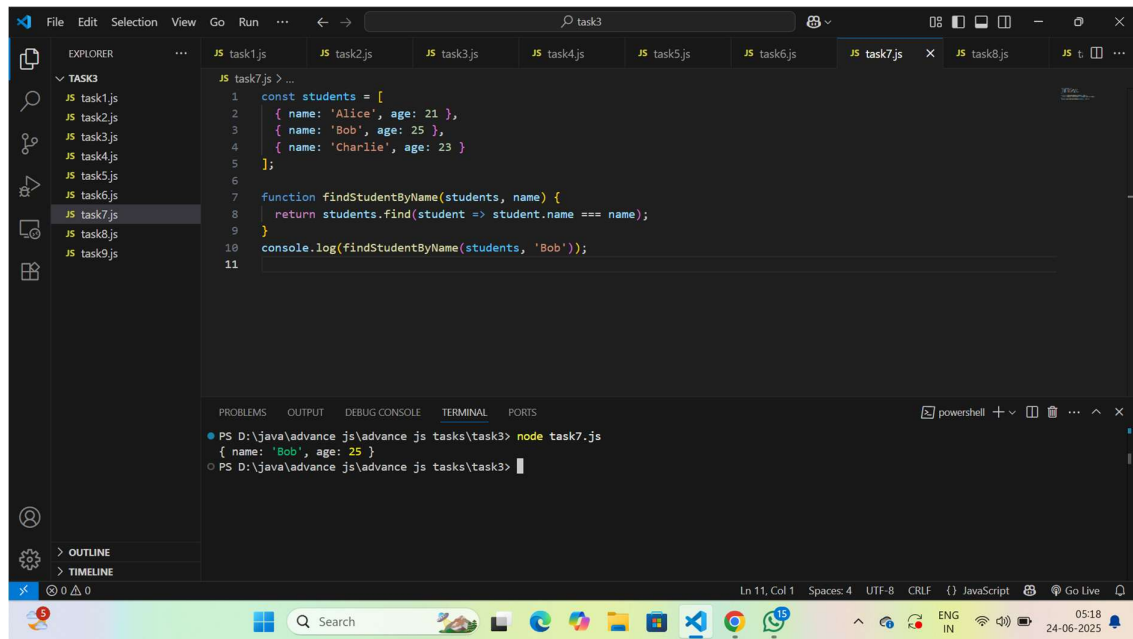


The screenshot shows the Visual Studio Code editor with the same 'TASK3' folder in the file explorer. The main editor displays 'task6.js' with the following code:

```
1 const input = [1, 3, 7, 10, 2];
2
3 function fNumber(numbers) {
4   return numbers.find(num => num % 2 === 0);
5 }
6 console.log(fNumber(input));
```

The bottom panel shows the 'TERMINAL' with the command `node task6.js` executed, resulting in the output `10`. The status bar at the bottom indicates 'Ln 6, Col 29'.

Q7;



The screenshot shows the Visual Studio Code editor with a file explorer on the left containing a folder named 'TASK3' with files task1.js through task9.js. The main editor displays 'task7.js' with the following JavaScript code:

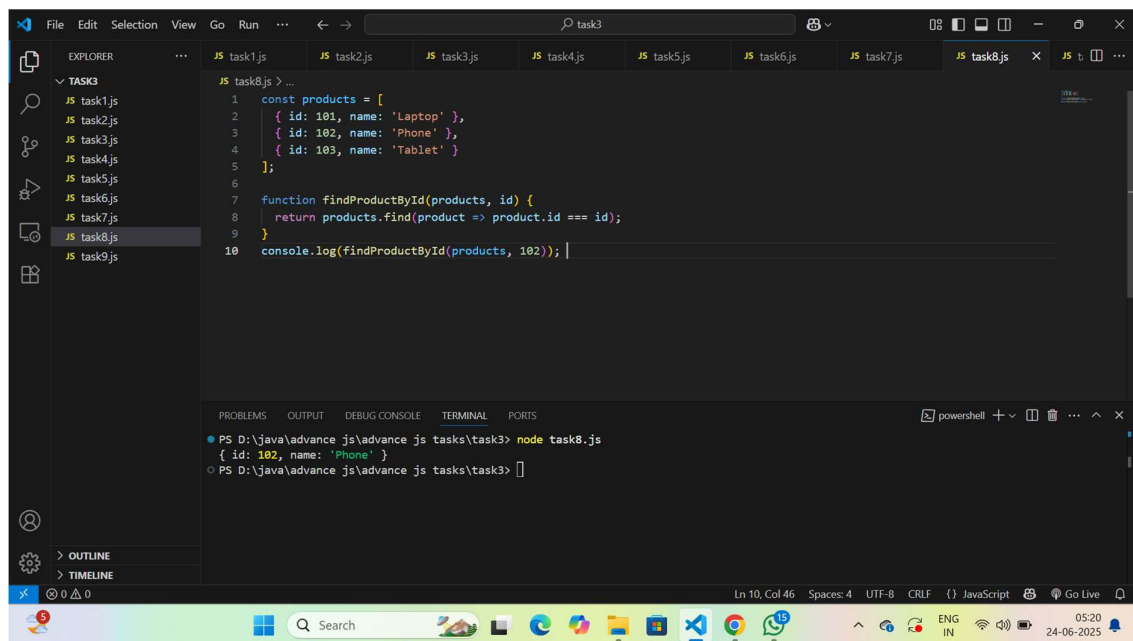
```
1 const students = [  
2   { name: 'Alice', age: 21 },  
3   { name: 'Bob', age: 25 },  
4   { name: 'Charlie', age: 23 }  
5 ];  
6  
7 function findStudentByName(students, name) {  
8   return students.find(student => student.name === name);  
9 }  
10 console.log(findStudentByName(students, 'Bob'));  
11
```

The bottom panel shows the 'TERMINAL' tab with the following output:

```
PS D:\java\advance js\advance js tasks\task3> node task7.js  
{ name: 'Bob', age: 25 }  
PS D:\java\advance js\advance js tasks\task3>
```

The status bar at the bottom indicates 'Ln 11, Col 1', 'Spaces: 4', 'UTF-8', 'CRLF', 'JavaScript', and 'Go Live'.

Q8;



The screenshot shows the Visual Studio Code editor with a file explorer on the left containing a folder named 'TASK3' with files task1.js through task9.js. The main editor displays 'task8.js' with the following JavaScript code:

```
1 const products = [  
2   { id: 101, name: 'Laptop' },  
3   { id: 102, name: 'Phone' },  
4   { id: 103, name: 'Tablet' }  
5 ];  
6  
7 function findProductById(products, id) {  
8   return products.find(product => product.id === id);  
9 }  
10 console.log(findProductById(products, 102));
```

The bottom panel shows the 'TERMINAL' tab with the following output:

```
PS D:\java\advance js\advance js tasks\task3> node task8.js  
{ id: 102, name: 'Phone' }  
PS D:\java\advance js\advance js tasks\task3>
```

The status bar at the bottom indicates 'Ln 10, Col 46', 'Spaces: 4', 'UTF-8', 'CRLF', 'JavaScript', and 'Go Live'.

Q9;

The screenshot shows the Visual Studio Code interface with a file explorer on the left containing a folder named 'TASK3' with files task1.js through task9.js. The main editor displays the content of task9.js, which defines an array of tasks and a function to find tasks due today. The terminal at the bottom shows the command 'node task9.js' being executed, resulting in a log output of the first task.

```
1 const tasks = [
2   { taskName: 'Task 1', dueDate: '2023-06-01' },
3   { taskName: 'Task 2', dueDate: '2024-05-01' },
4   { taskName: 'Task 3', dueDate: '2024-01-01' }
5 ];
6
7 function findTask(tasks) {
8   const today = new Date();
9   return tasks.find(task => new Date(task.dueDate) < today);
10 }
11 console.log(findTask(tasks));
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS D:\java\advance js\advance js tasks\task3> node task9.js
{ taskName: 'Task 1', dueDate: '2023-06-01' }
```

PS D:\java\advance js\advance js tasks\task3>

Ln 11, Col 17 Spaces: 4 UTF-8 CRLF {} JavaScript Go Live