

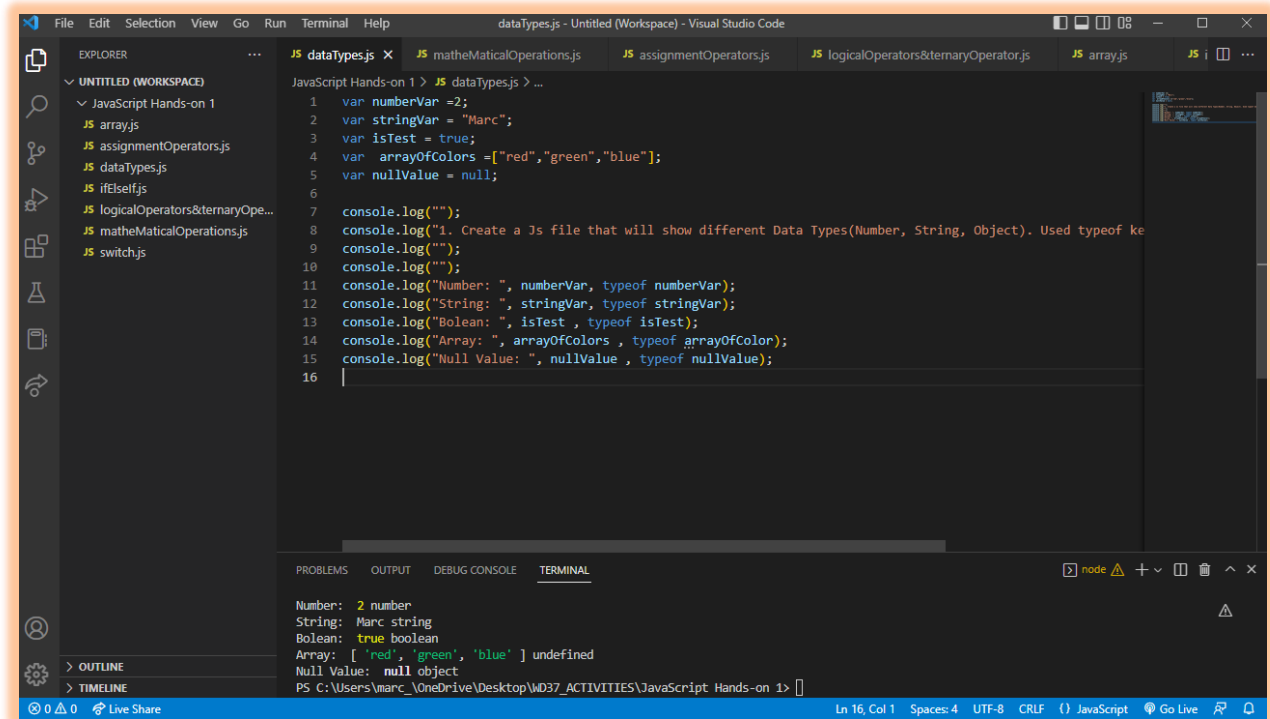
JavaScript Hands-on 1

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1. Data Types



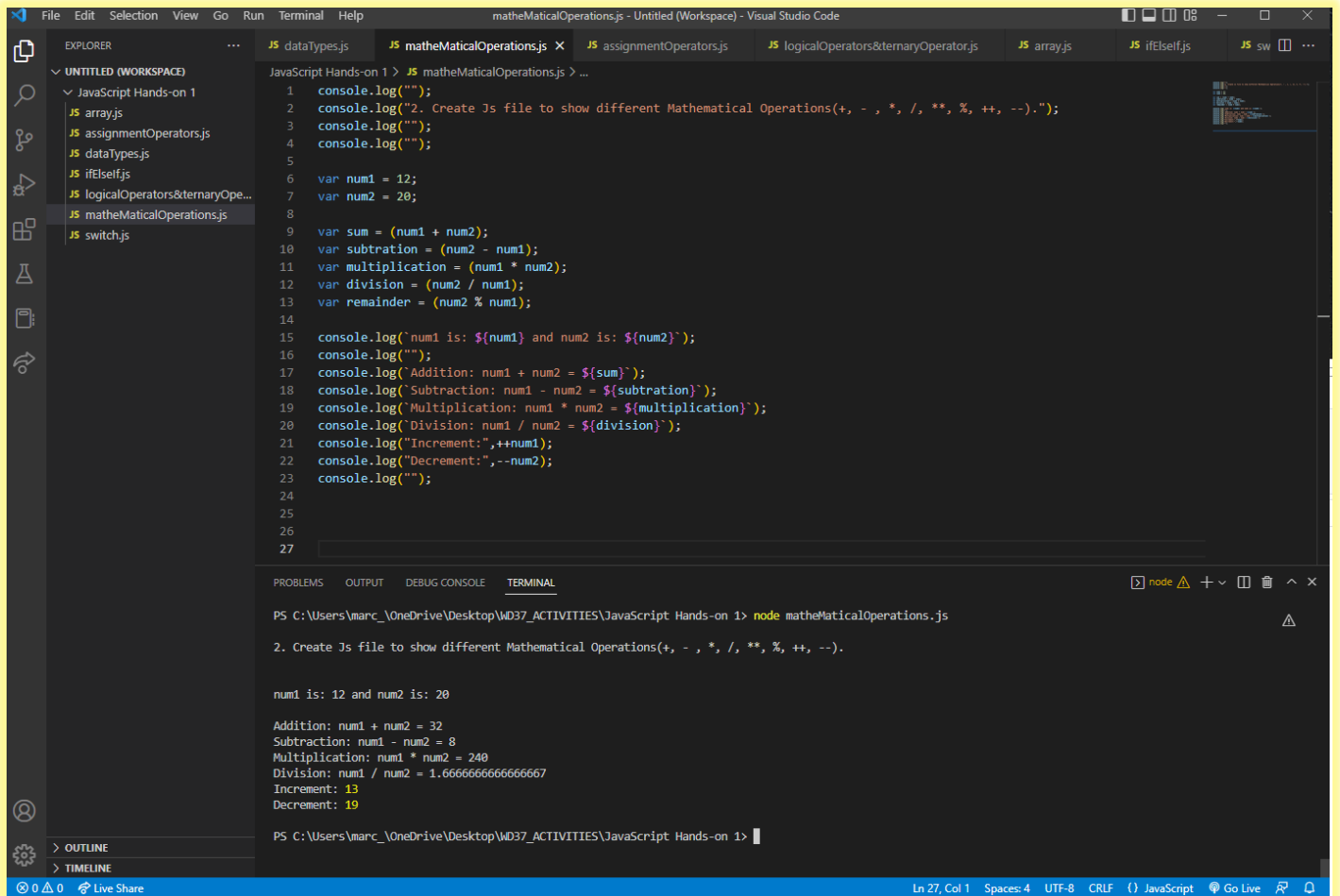
```
File Edit Selection View Go Run Terminal Help
dataTypes.js - Untitled (Workspace) - Visual Studio Code

EXPLORER
  UNTITLED (WORKSPACE)
    JavaScript Hands-on 1
      JS arrayjs
      JS assignmentOperators.js
      JS dataTypes.js
      JS ifElse.js
      JS logicalOperators&ternaryOperator.js
      JS matheMaticalOperations.js
      JS switch.js

JavaScript Hands-on 1 > JS dataTypes.js > ...
1  var numberVar = 2;
2  var stringVar = "Marc";
3  var isTest = true;
4  var arrayOfColors = ["red", "green", "blue"];
5  var nullValue = null;
6
7  console.log("");
8  console.log("1. Create a Js file that will show different Data Types(Number, String, Object). Used typeof ke
9  console.log("");
10 console.log("");
11 console.log("Number: ", numberVar, typeof numberVar);
12 console.log("String: ", stringVar, typeof stringVar);
13 console.log("Boolean: ", isTest, typeof isTest);
14 console.log("Array: ", arrayOfColors, typeof arrayOfColors);
15 console.log("Null Value: ", nullValue, typeof nullValue);
16

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
node
Number: 2 number
String: Marc string
Boolean: true boolean
Array: [ 'red', 'green', 'blue' ] undefined
Null Value: null object
PS C:\Users\marc_OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1>
```

2. Mathematical Operations



The screenshot shows the Visual Studio Code editor with a workspace titled "matheMaticalOperations.js - Untitled (Workspace)". The Explorer sidebar on the left shows a folder named "JavaScript Hands-on 1" containing several files: "array.js", "assignmentOperators.js", "dataTypes.js", "ifElse.js", "logicalOperators&ternaryOperator.js", "matheMaticalOperations.js" (selected), and "switch.js".

The main editor displays the content of "matheMaticalOperations.js". The code defines two variables, `num1` and `num2`, and performs various mathematical operations on them, logging the results to the console.

```
1 console.log("");
2 console.log("2. Create Js file to show different Mathematical Operations(+, -, *, /, **, %, ++, --).");
3 console.log("");
4 console.log("");
5
6 var num1 = 12;
7 var num2 = 20;
8
9 var sum = (num1 + num2);
10 var subtraction = (num2 - num1);
11 var multiplication = (num1 * num2);
12 var division = (num2 / num1);
13 var remainder = (num2 % num1);
14
15 console.log("num1 is: ${num1} and num2 is: ${num2}");
16 console.log("");
17 console.log(`Addition: num1 + num2 = ${sum}`);
18 console.log(`Subtraction: num1 - num2 = ${subtraction}`);
19 console.log(`Multiplication: num1 * num2 = ${multiplication}`);
20 console.log(`Division: num1 / num2 = ${division}`);
21 console.log("Increment:", ++num1);
22 console.log("Decrement:", --num2);
23 console.log("");
24
25
26
27
```

The bottom panel shows the TERMINAL output, which matches the console logs in the code:

```
PS C:\Users\marc_\OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1> node matheMaticalOperations.js

2. Create Js file to show different Mathematical Operations(+, -, *, /, **, %, ++, --).

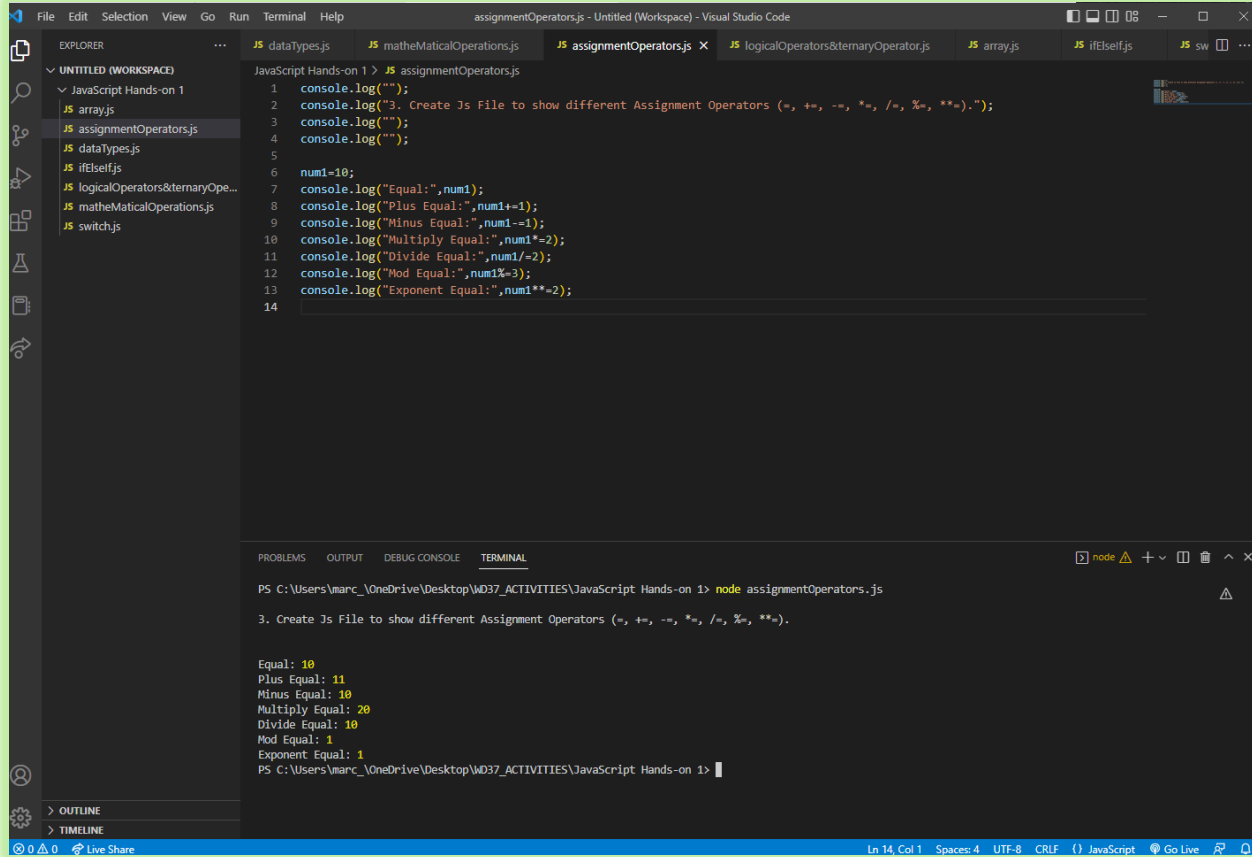
num1 is: 12 and num2 is: 20

Addition: num1 + num2 = 32
Subtraction: num1 - num2 = 8
Multiplication: num1 * num2 = 240
Division: num1 / num2 = 1.6666666666666667
Increment: 13
Decrement: 19

PS C:\Users\marc_\OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1>
```

The status bar at the bottom indicates the current line and column (Ln 27, Col 1), the number of spaces (4), the encoding (UTF-8), the line ending (CRLF), the language (JavaScript), and the Go Live extension.

3. Assignment Operators



The screenshot shows the Visual Studio Code interface with a workspace titled "assignmentOperators.js - Untitled (Workspace)". The Explorer sidebar on the left shows a file tree with "JavaScript Hands-on 1" containing several files, including "assignmentOperators.js" which is currently selected. The main editor displays the content of "assignmentOperators.js":

```
1 console.log("");
2 console.log("3. Create Js File to show different Assignment Operators (=, +=, -=, *=, /=, %=, **=).");
3 console.log("");
4 console.log("");
5
6 num1=10;
7 console.log("Equal:",num1);
8 console.log("Plus Equal:",num1+=1);
9 console.log("Minus Equal:",num1-=1);
10 console.log("Multiply Equal:",num1*=2);
11 console.log("Divide Equal:",num1/=2);
12 console.log("Mod Equal:",num1%=3);
13 console.log("Exponent Equal:",num1**=2);
14
```

Below the editor, the TERMINAL panel shows the command to run the file and its output:

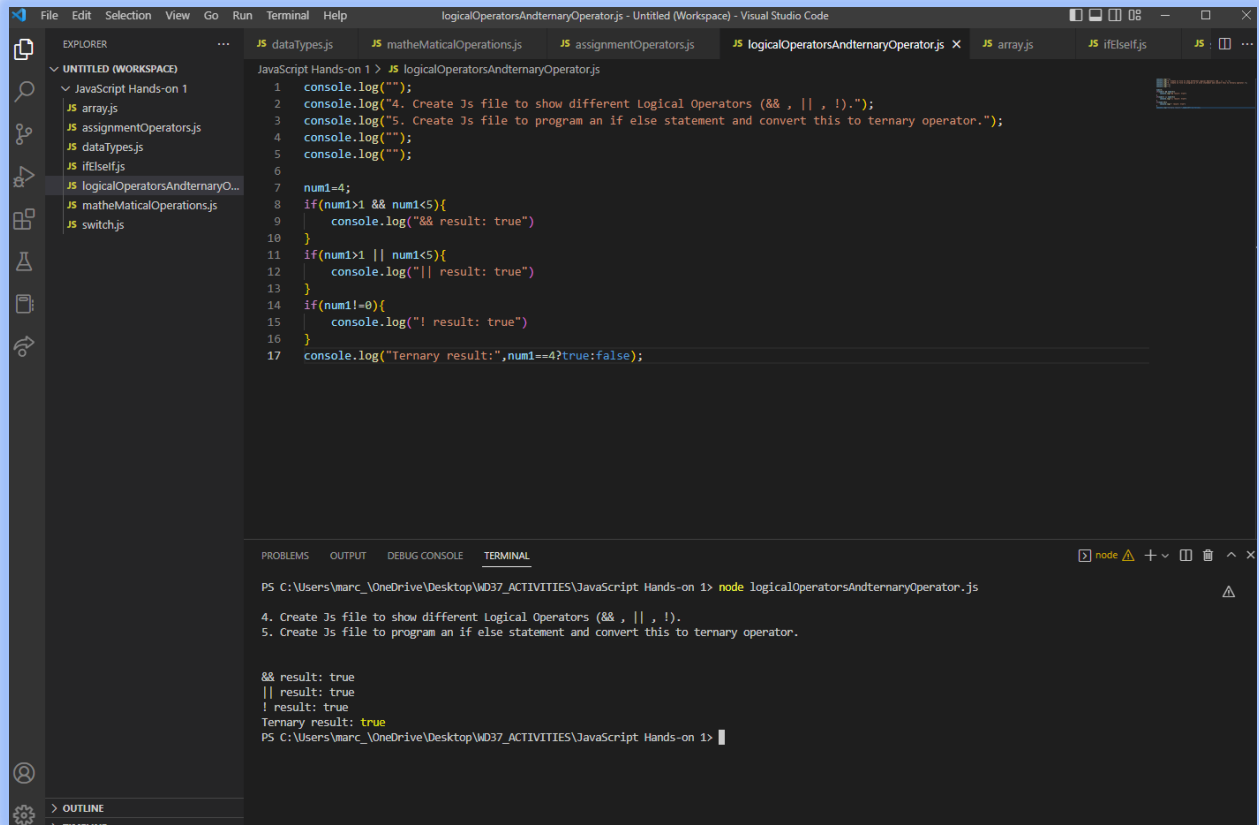
```
PS C:\Users\marc_\OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1> node assignmentOperators.js

3. Create Js File to show different Assignment Operators (=, +=, -=, *=, /=, %=, **=).

Equal: 10
Plus Equal: 11
Minus Equal: 10
Multiply Equal: 20
Divide Equal: 10
Mod Equal: 1
Exponent Equal: 1
PS C:\Users\marc_\OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1>
```

The status bar at the bottom indicates the current position is "Ln 14, Col 1" with "Spaces: 4", "UTF-8" encoding, and "CRLF" line endings.

4. Logical Operators
5. ternary operator



```
File Edit Selection View Go Run Terminal Help
logicalOperatorsAndternaryOperator.js - Untitled (Workspace) - Visual Studio Code

EXPLORER
  UNTITLED (WORKSPACE)
    JavaScript Hands-on 1
      JS arrays.js
      JS assignmentOperators.js
      JS dataTypes.js
      JS ifElse.js
      JS logicalOperatorsAndternaryOperator.js
      JS matheMaticalOperations.js
      JS switch.js

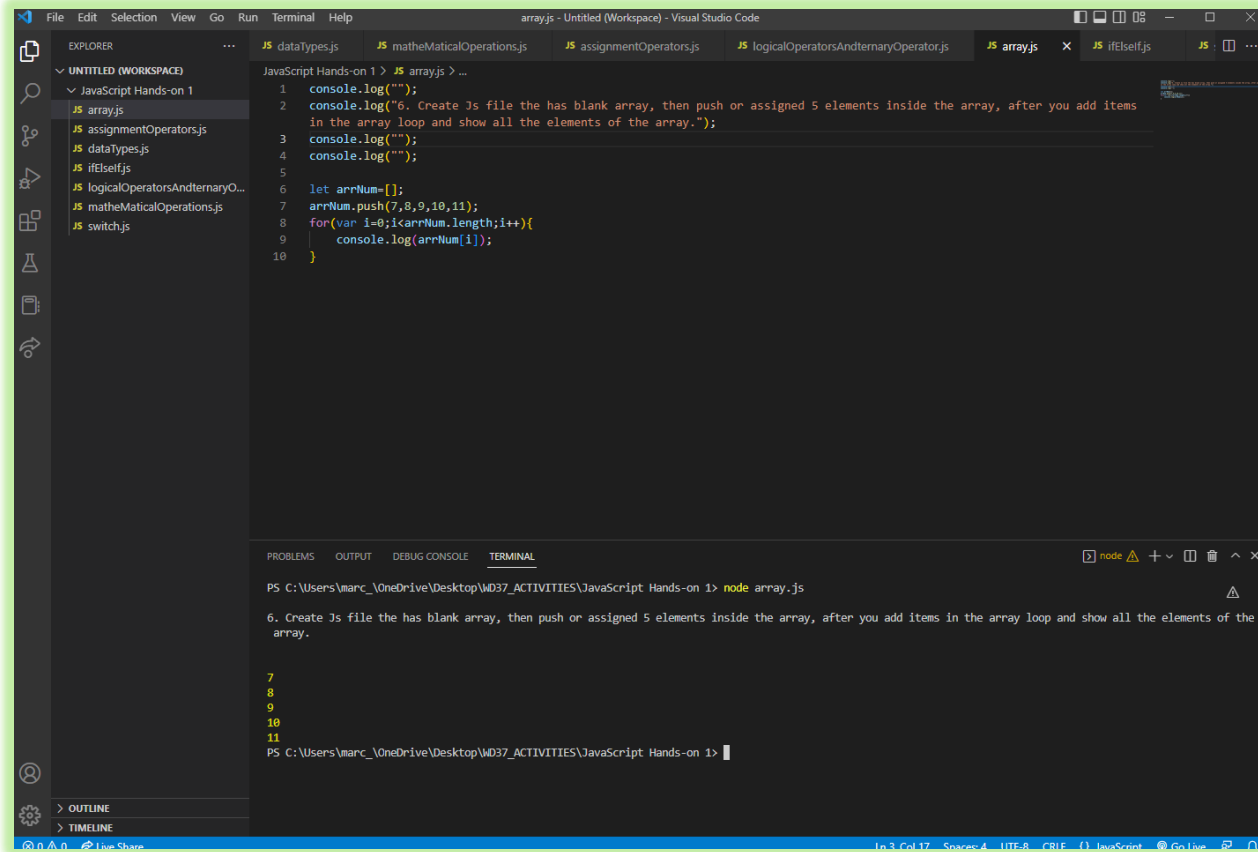
logicalOperatorsAndternaryOperator.js
1 console.log("");
2 console.log("4. Create Js file to show different Logical Operators (&& , || , !).");
3 console.log("5. Create Js file to program an if else statement and convert this to ternary operator.");
4 console.log("");
5 console.log("");
6
7 num1=4;
8 if(num1>1 && num1<5){
9   console.log("&& result: true")
10 }
11 if(num1>1 || num1<5){
12   console.log("|| result: true")
13 }
14 if(num1!=0){
15   console.log("! result: true")
16 }
17 console.log("Ternary result:",num1==4?true:false);

TERMINAL
PS C:\Users\marc_OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1> node logicalOperatorsAndternaryOperator.js

4. Create Js file to show different Logical Operators (&& , || , !).
5. Create Js file to program an if else statement and convert this to ternary operator.

&& result: true
|| result: true
! result: true
Ternary result: true
PS C:\Users\marc_OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1>
```

6. Array push



The screenshot shows the Visual Studio Code editor with a workspace titled 'array.js - Untitled (Workspace)'. The Explorer sidebar on the left shows a folder named 'JavaScript Hands-on 1' containing several files, including 'array.js'. The main editor area displays the content of 'array.js' with the following code:

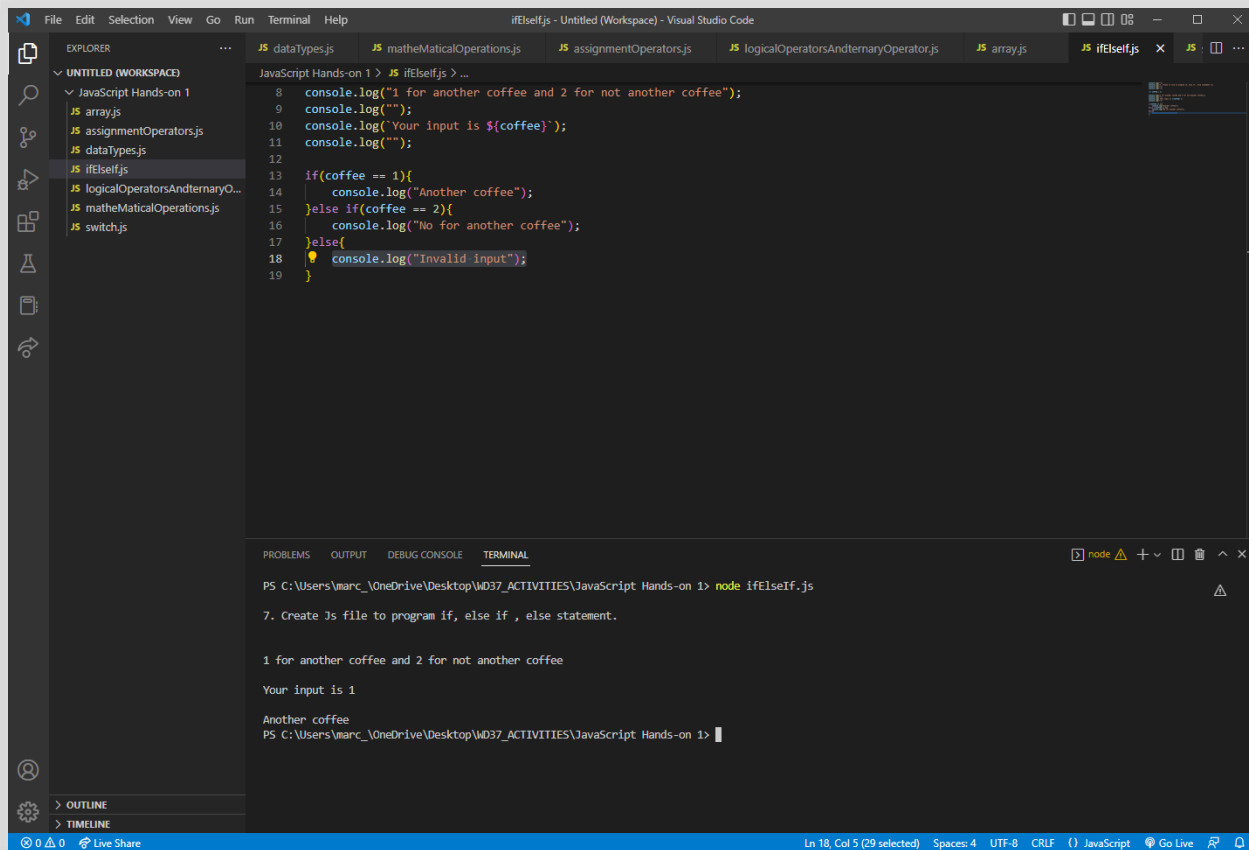
```
1 console.log("");
2 console.log("6. Create Js file the has blank array, then push or assigned 5 elements inside the array, after you add items
  in the array loop and show all the elements of the array.");
3 console.log("");
4 console.log("");
5
6 let arrNum=[];
7 arrNum.push(7,8,9,10,11);
8 for(var i=0;i<arrNum.length;i++){
9   console.log(arrNum[i]);
10 }
```

Below the editor, the TERMINAL panel is active, showing the command 'node array.js' executed in a PowerShell prompt. The output of the program is displayed below the command:

```
6. Create Js file the has blank array, then push or assigned 5 elements inside the array, after you add items in the array loop and show all the elements of the array.

7
8
9
10
11
```

7. if, else if , else statement



```
File Edit Selection View Go Run Terminal Help
ifElseIf.js - Untitled (Workspace) - Visual Studio Code

EXPLORER
  UNTITLED (WORKSPACE)
    JavaScript Hands-on 1
      array.js
      assignmentOperators.js
      dataTypes.js
      ifElseIf.js
      logicalOperatorsAndTernaryOperator.js
      matheMaticalOperations.js
      switch.js

JavaScript Hands-on 1 > JS ifElseIf.js > ...
8 console.log("1 for another coffee and 2 for not another coffee");
9 console.log("");
10 console.log("Your input is ${coffee}");
11 console.log("");
12
13 if(coffee == 1){
14   console.log("Another coffee");
15 }else if(coffee == 2){
16   console.log("No for another coffee");
17 }else{
18   console.log("Invalid input");
19 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\marc_\OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1> node ifElseIf.js

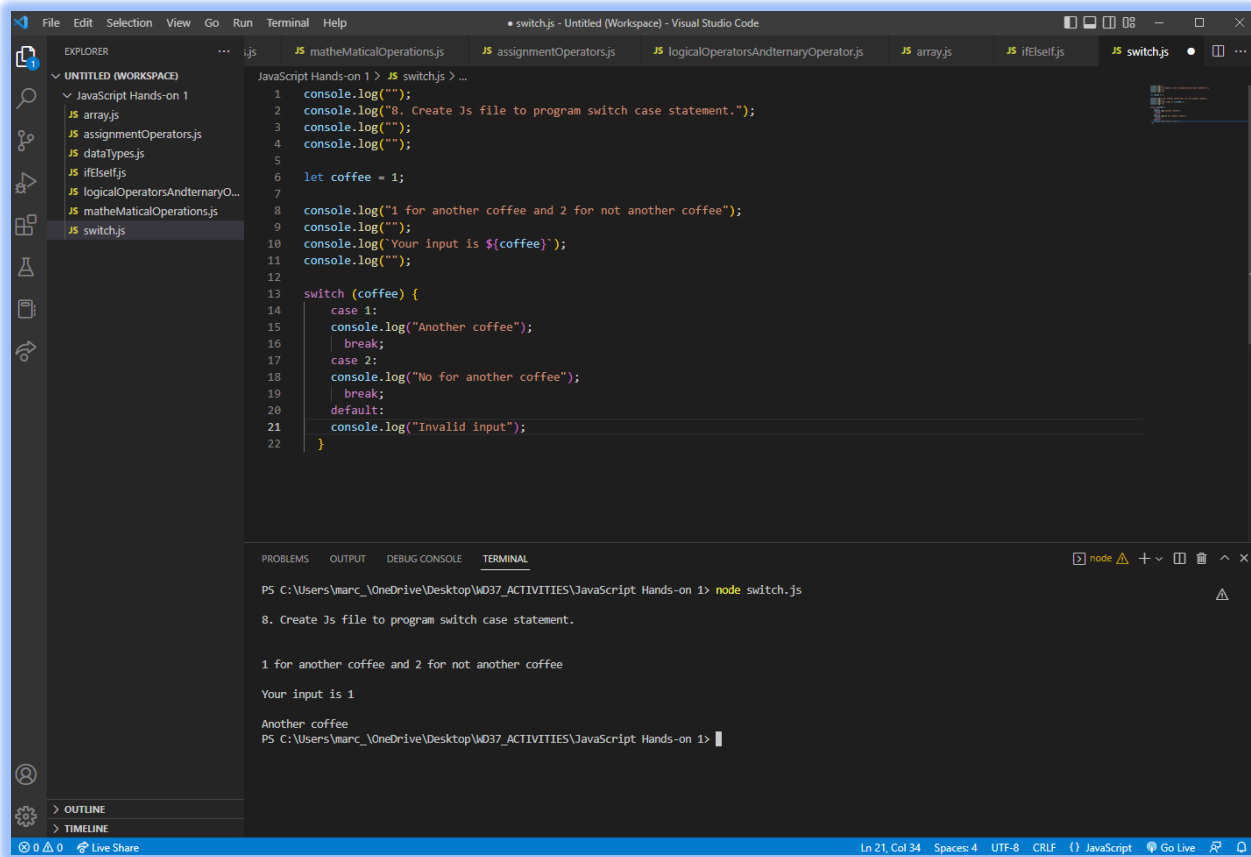
7. Create Js file to program if, else if , else statement.

1 for another coffee and 2 for not another coffee

Your input is 1

Another coffee
PS C:\Users\marc_\OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1>
```

8. Switch case



The screenshot shows the Visual Studio Code interface with a workspace named "switch.js - Untitled (Workspace)". The Explorer sidebar on the left shows a folder named "JavaScript Hands-on 1" containing several files, including "switch.js". The main editor displays the content of "switch.js", which contains the following JavaScript code:

```
JavaScript Hands-on 1 > JS switch.js > ...
1 console.log("");
2 console.log("8. Create Js file to program switch case statement.");
3 console.log("");
4 console.log("");
5
6 let coffee = 1;
7
8 console.log("1 for another coffee and 2 for not another coffee");
9 console.log("");
10 console.log("Your input is ${coffee}");
11 console.log("");
12
13 switch (coffee) {
14   case 1:
15     console.log("Another coffee");
16     break;
17   case 2:
18     console.log("No for another coffee");
19     break;
20   default:
21     console.log("Invalid input");
22 }
```

The bottom panel shows the TERMINAL output, which matches the console.log statements in the code:

```
PS C:\Users\marc_OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1> node switch.js

8. Create Js file to program switch case statement.

1 for another coffee and 2 for not another coffee

Your input is 1

Another coffee
PS C:\Users\marc_OneDrive\Desktop\WD37_ACTIVITIES\JavaScript Hands-on 1>
```

The status bar at the bottom indicates the current position is "Ln 21, Col 34" and the file encoding is "UTF-8".

