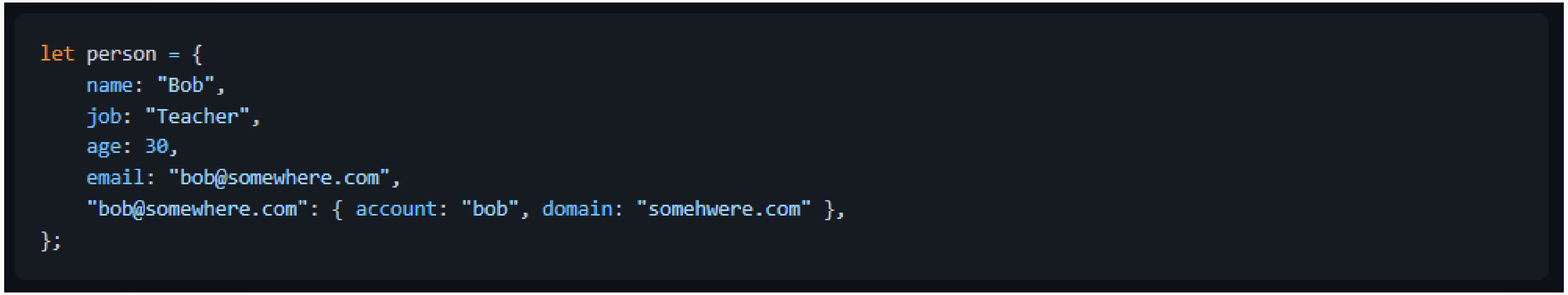
PART 2

LAB SESSION

✓ **Objects**

Lab 7a: Accessing Object Property With Brackets

1. Create *7a-bracket-accessor.js*

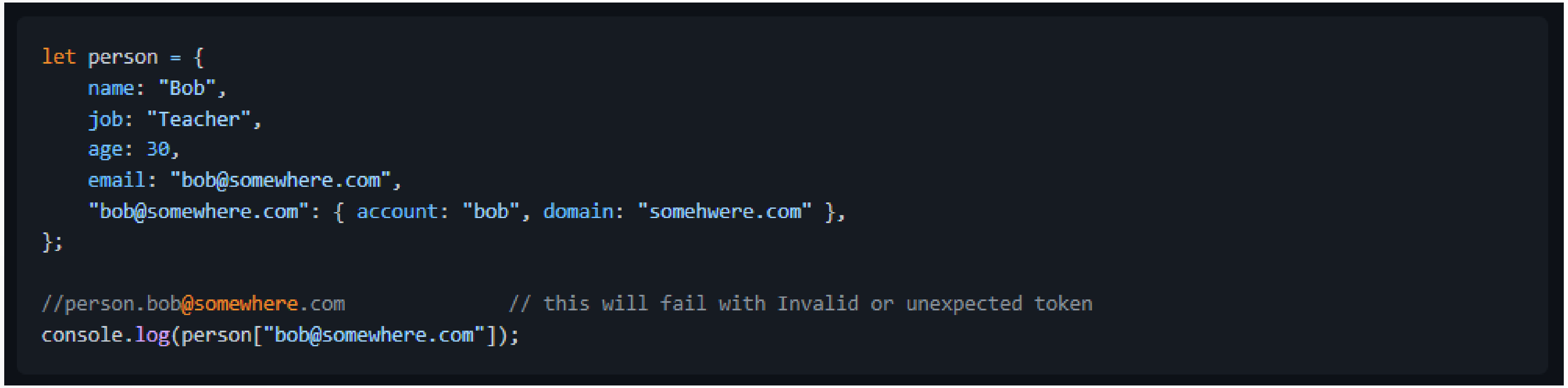


```
let person = {
    name: "Bob",
    job: "Teacher",
    age: 30,
    email: "bob@somewhere.com",
    "bob@somewhere.com": { account: "bob", domain: "somehwere.com" },
};
```

2. Write the Javascript code to access and display the value of 'bob@somewhere.com' property.

Answer

Since 'bob@somewhere.com' doesn't comply with Javascript's grammatical rule, it cannot be accessed using the dot accessor notation person.bob@somewhere.com but it can still be accessed using the bracket accessor notation, person["bob@somewhere.com"].



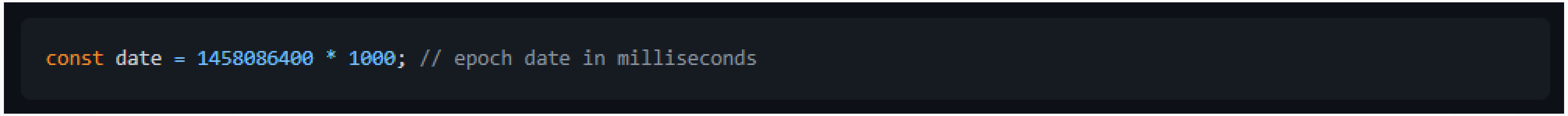
```
let person = {
    name: "Bob",
    job: "Teacher",
    age: 30,
    email: "bob@somewhere.com",
    "bob@somewhere.com": { account: "bob", domain: "somehwere.com" },
};

//person.bob@somewhere.com              // this will fail with Invalid or unexpected token
console.log(person["bob@somewhere.com"]);
```

Lab 7d: Converting Date to String

In this lab, we will learn how to use the Javascript Date object to convert date into string.

- In Javascript, Date objects contains a single moment in time in a platform-independent format represented by a number.
- This number represents milliseconds since 1 January 1970 UTC. UTC means the timezone is GMT +0 and each day is 86,400,000 milliseconds. This date format is known as Unix Epoch.
- The purpose of this lab is to demonstate how to convert a numeric date value into a date string of the form yyyy-mm-dd in GMT.

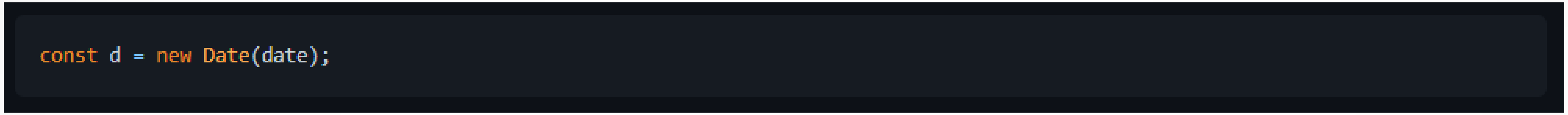
1. Create the file *7d-date-to-string.js*.



```
const date = 1458086400 * 1000; // epoch date in milliseconds
```

Lab 7d: Converting Date to String

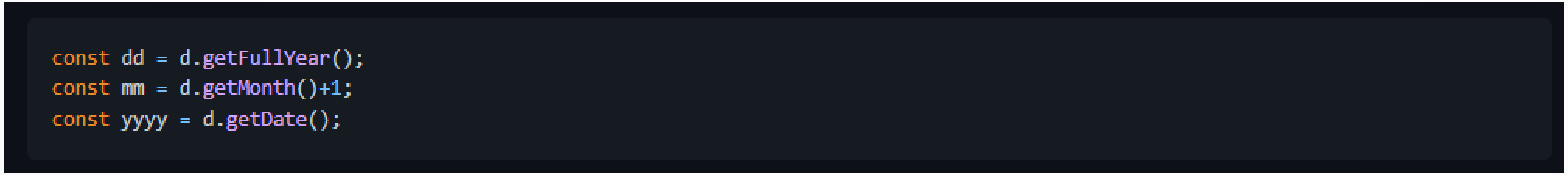
2. Create a Javascript Date object using CloseTime * 1000.



```
const d = new Date(date);
```

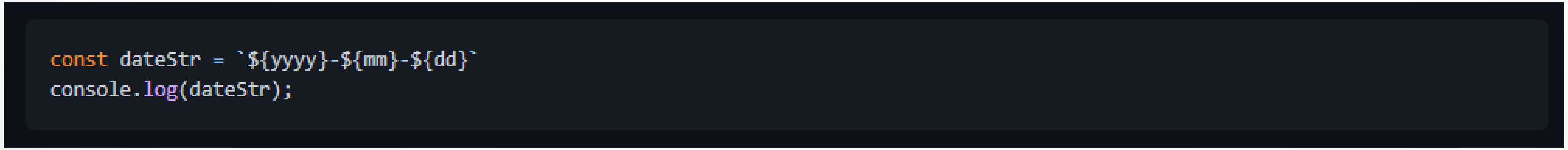
3. Extract year, month and date using getFullYear(), getMonth() and getDate() respectively from the date object.

NOTE : getMonth() returns month with index starting from 0 to 11, add +1 to get the correct month.



```
const dd = d.getFullYear();
const mm = d.getMonth()+1;
const yyyy = d.getDate();
```

4.Concatenate the values using string interpolation.



```
const dateStr = `${yyyy}-${mm}-${dd}`
console.log(dateStr);
```

The result should display 2016-2-16

Lab 7e: Exporting function as reusable module

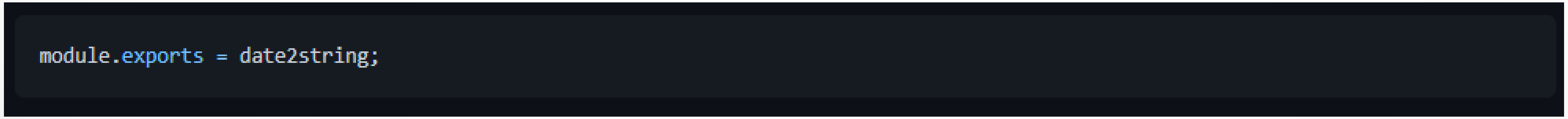
In this lab, we will learn how to export the date to string function into a module. A module in Node.JS is a library of objects that can be imported and reused by other Javascripts.

1. Create the file **date2string.js**.
2. Create a function **date2string** in date2string.js that takes in a single parameter called 'date' in milliseconds.

   The function should return the date in string formatted as yyyy-mm-dd.
3. Export as module.

   module.exports is a special object that is included in every Node.JS file by default. The above function date2string will be exported as a module that can be imported into other Javascript.

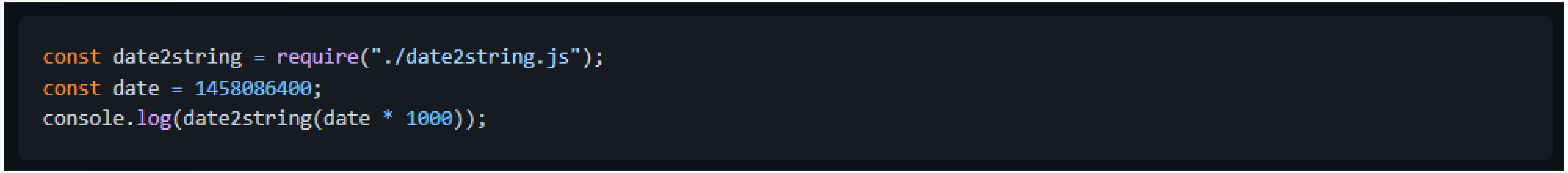
   Add the following line to the end of your date2string.js file to export the function.



```
module.exports = date2string;
```

Lab 7e: Exporting function as reusable module

4. Create the file *7e-date-string-import.js* and run it.



```
const date2string = require("./date2string.js");
const date = 1458086400;
console.log(date2string(date * 1000));
```

The result should return 2016-2-16 computed using the imported date2string