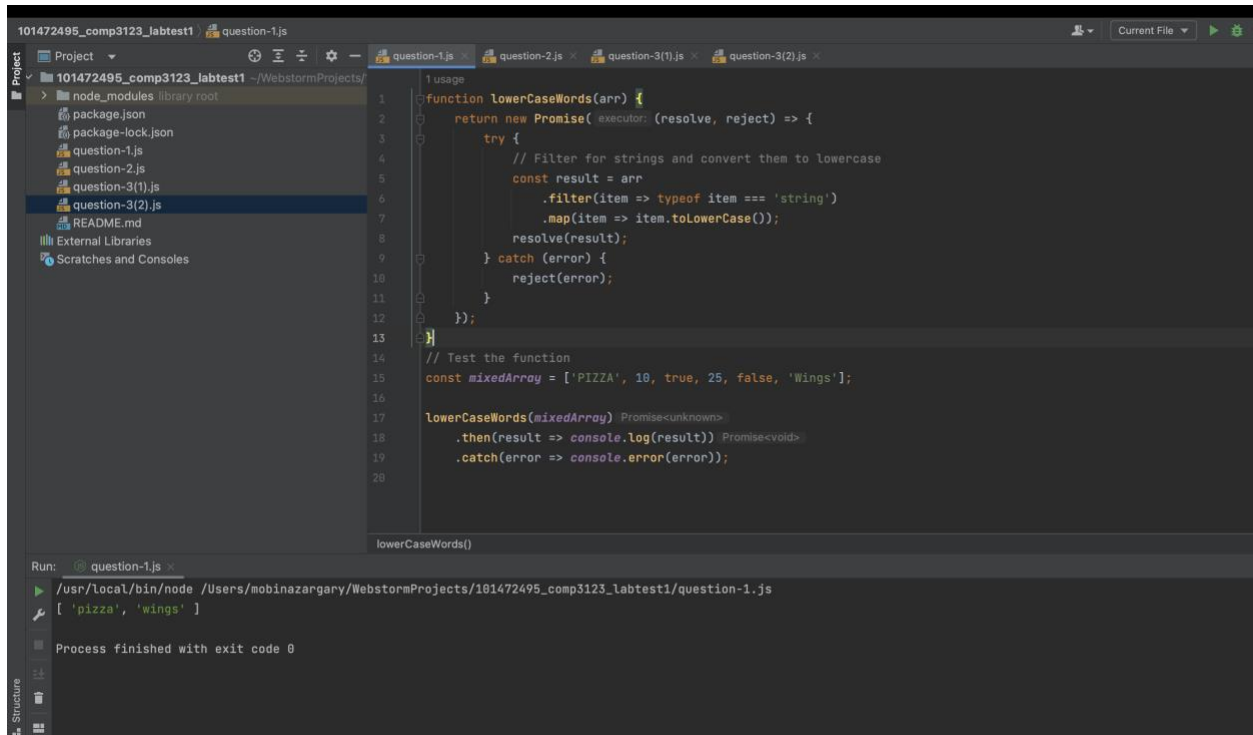


Git hub URL: [https://github.com/Mobinazargary/101472495\\_comp3123\\_labtest1.git](https://github.com/Mobinazargary/101472495_comp3123_labtest1.git)

## Question1:



The screenshot shows a code editor with a project named '101472495\_comp3123\_labtest1'. The file explorer on the left shows a directory structure with files like 'package.json', 'package-lock.json', and several 'question' files. The main editor displays the content of 'question-1.js', which defines a function 'lowerCaseWords' that takes an array and returns a Promise. The function filters the array for strings, converts them to lowercase, and resolves the Promise with the result. Below the function definition, there is a test case using a 'mixedArray' containing various data types. The 'Run' panel at the bottom shows the command executed and the output, which is an array containing the lowercase strings 'pizza' and 'wings'.

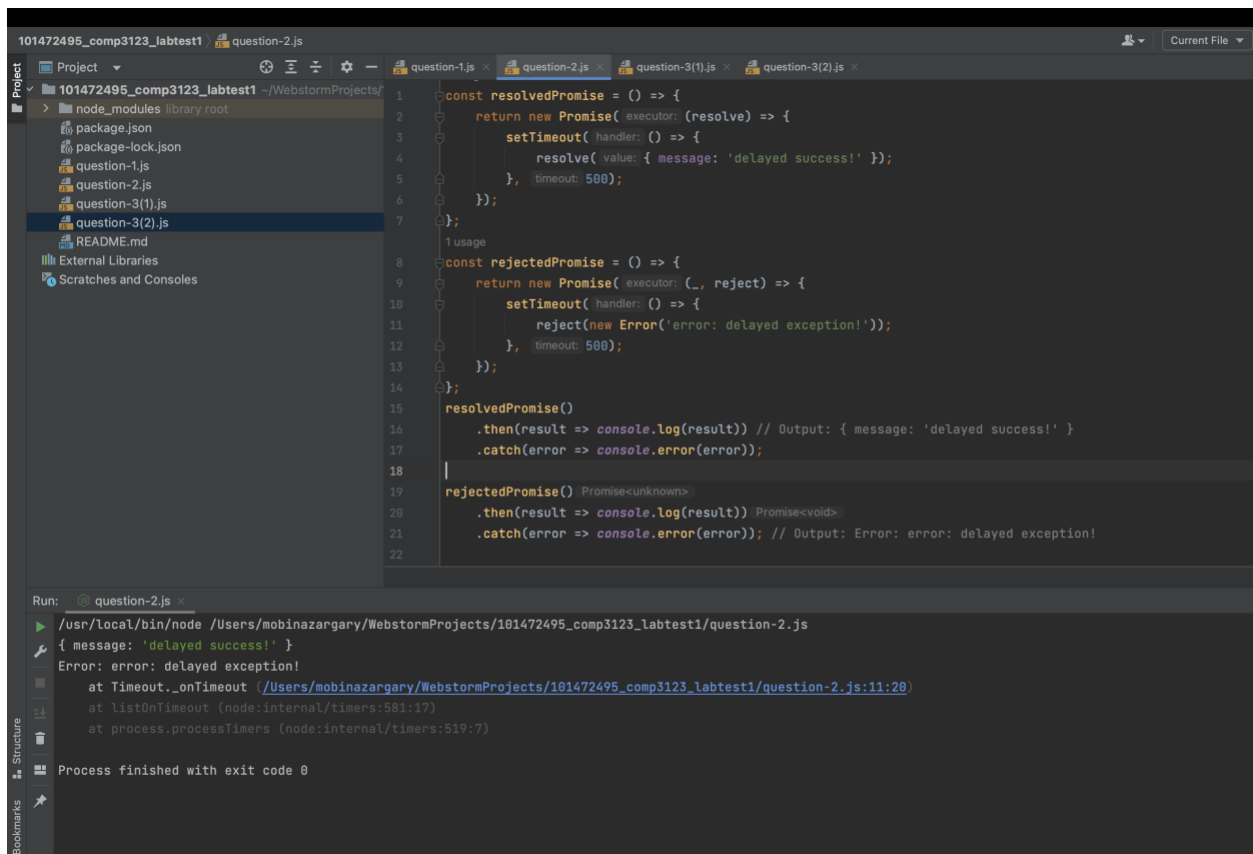
```
1 usage
2 function lowerCaseWords(arr) {
3   return new Promise( {executor: (resolve, reject) => {
4     try {
5       // Filter for strings and convert them to lowercase
6       const result = arr
7         .filter(item => typeof item === 'string')
8         .map(item => item.toLowerCase());
9       resolve(result);
10    } catch (error) {
11      reject(error);
12    }
13  } });
14
15  // Test the function
16  const mixedArray = ['PIZZA', 10, true, 25, false, 'Wings'];
17
18  lowerCaseWords(mixedArray) Promise<unknown>
19    .then(result => console.log(result)) Promise<void>
20    .catch(error => console.error(error));
```

Run: question-1.js x

```
/usr/local/bin/node /Users/mobinazargary/WebstormProjects/101472495_comp3123_labtest1/question-1.js
[ 'pizza', 'wings' ]
```

Process finished with exit code 0

## Question 2:



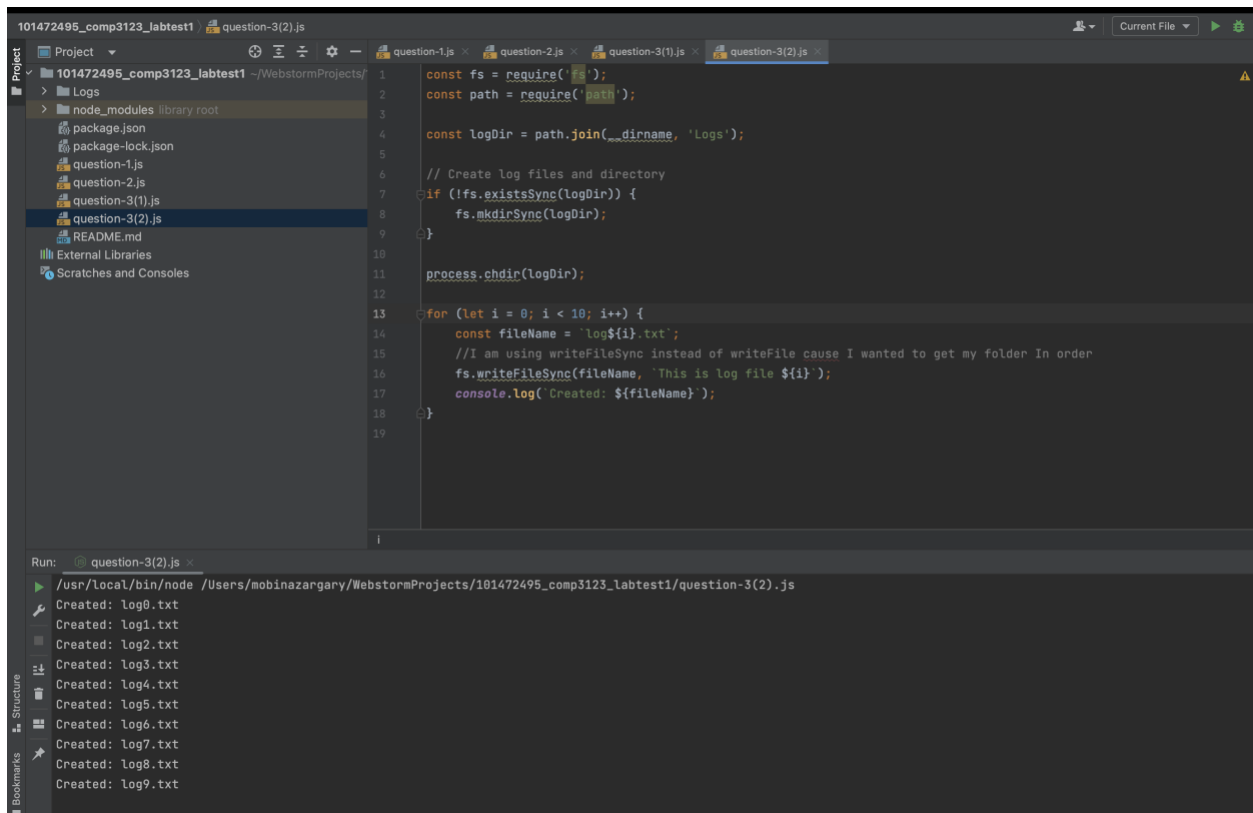
The screenshot shows a code editor with a file named `question-2.js` open. The code defines two promises, `resolvedPromise` and `rejectedPromise`, and then calls them. The `resolvedPromise` is resolved after a 500ms delay with the message `{ message: 'delayed success!' }`. The `rejectedPromise` is rejected after a 500ms delay with the error `error: delayed exception!`. The code is as follows:

```
1 const resolvedPromise = () => {
2   return new Promise( executor: (resolve) => {
3     setTimeout( handler: () => {
4       resolve( value: { message: 'delayed success!' } );
5     }, timeout: 500 );
6   });
7 };
8
9 const rejectedPromise = () => {
10  return new Promise( executor: (_, reject) => {
11    setTimeout( handler: () => {
12      reject( new Error('error: delayed exception!') );
13    }, timeout: 500 );
14  });
15 };
16
17 resolvedPromise()
18   .then( result => console.log( result ) ) // Output: { message: 'delayed success!' }
19   .catch( error => console.error( error ) );
20
21 rejectedPromise() Promise<unknown>
22   .then( result => console.log( result ) ) Promise<void>
23   .catch( error => console.error( error ) ); // Output: Error: error: delayed exception!
```

The console output shows the execution of the code:

```
Run: question-2.js x
/usr/local/bin/node /Users/mobinazargary/WebstormProjects/101472495_comp3123_labtest1/question-2.js
{ message: 'delayed success!' }
Error: error: delayed exception!
    at Timeout._onTimeout (/Users/mobinazargary/WebstormProjects/101472495_comp3123_labtest1/question-2.js:11:20)
    at listOnTimeout (node:internal/timers:581:17)
    at process.processTimers (node:internal/timers:519:7)
Process finished with exit code 0
```

### Question 3 (Create Log Files):



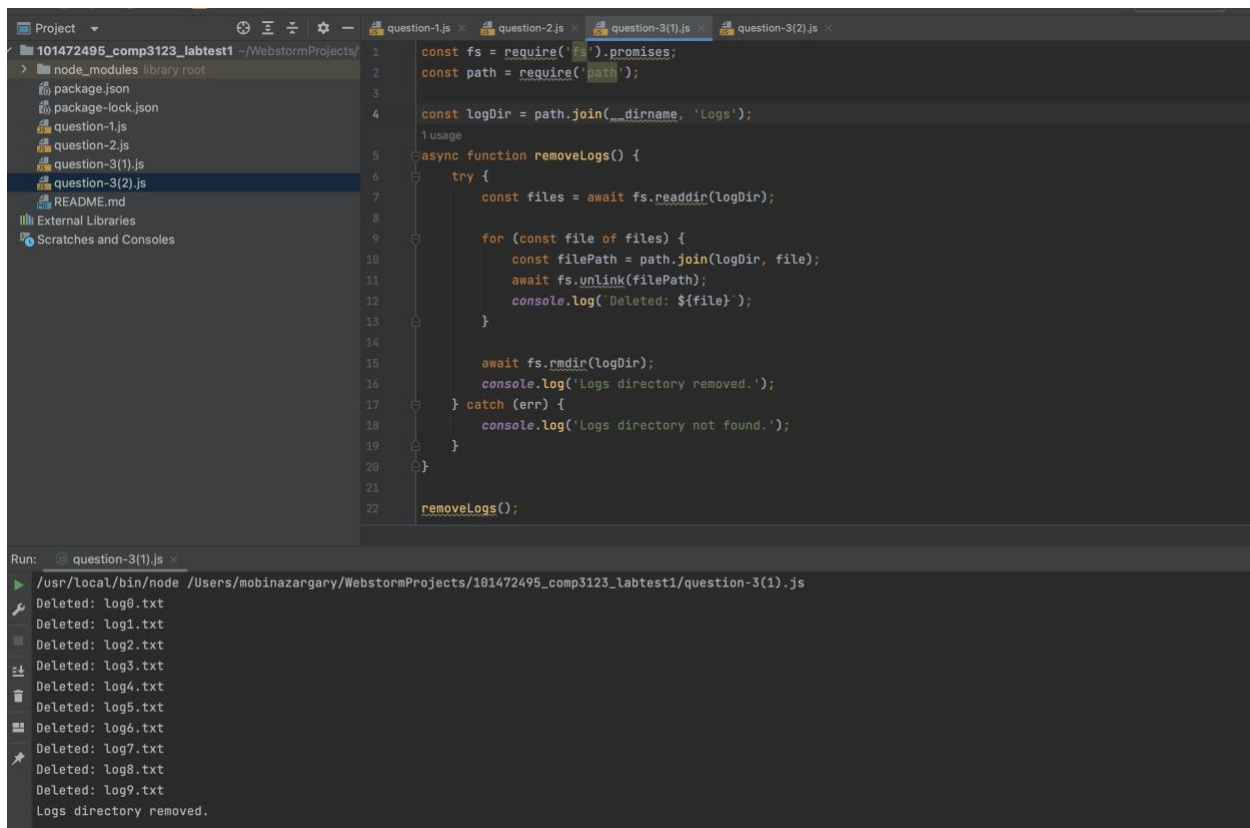
```
1  const fs = require('fs');
2  const path = require('path');
3
4  const logDir = path.join(__dirname, 'Logs');
5
6  // Create log files and directory
7  if (!fs.existsSync(logDir)) {
8    fs.mkdirSync(logDir);
9  }
10
11  process.chdir(logDir);
12
13  for (let i = 0; i < 10; i++) {
14    const fileName = `log${i}.txt`;
15    //I am using writeFileSync instead of writeFile cause I wanted to get my folder In order
16    fs.writeFileSync(fileName, `This is log file ${i}`);
17    console.log(`Created: ${fileName}`);
18  }
19
```

Run: question-3(2).js

/usr/local/bin/node /Users/mobinazargary/WebstormProjects/101472495\_comp3123\_labtest1/question-3(2).js

Created: log0.txt  
Created: log1.txt  
Created: log2.txt  
Created: log3.txt  
Created: log4.txt  
Created: log5.txt  
Created: log6.txt  
Created: log7.txt  
Created: log8.txt  
Created: log9.txt

### Question 3 (Remove Log Files):



```
1  const fs = require('fs').promises;
2  const path = require('path');
3
4  const logDir = path.join(__dirname, 'Logs');
5
6  async function removeLogs() {
7    try {
8      const files = await fs.readdir(logDir);
9
10     for (const file of files) {
11       const filePath = path.join(logDir, file);
12       await fs.unlink(filePath);
13       console.log(`Deleted: ${file}`);
14     }
15
16     await fs.rmdir(logDir);
17     console.log('Logs directory removed.');

Run: question-3(1).js



/usr/local/bin/node /Users/mobinazargary/WebstormProjects/101472495_comp3123_labtest1/question-3(1).js



Deleted: log0.txt  
Deleted: log1.txt  
Deleted: log2.txt  
Deleted: log3.txt  
Deleted: log4.txt  
Deleted: log5.txt  
Deleted: log6.txt  
Deleted: log7.txt  
Deleted: log8.txt  
Deleted: log9.txt  
Logs directory removed.


```