

Universidad de San Carlos de Guatemala

Facultad de Ingeniería

Escuela de Ciencias y Sistemas

Software avanzado

Práctica 2 – parte 2

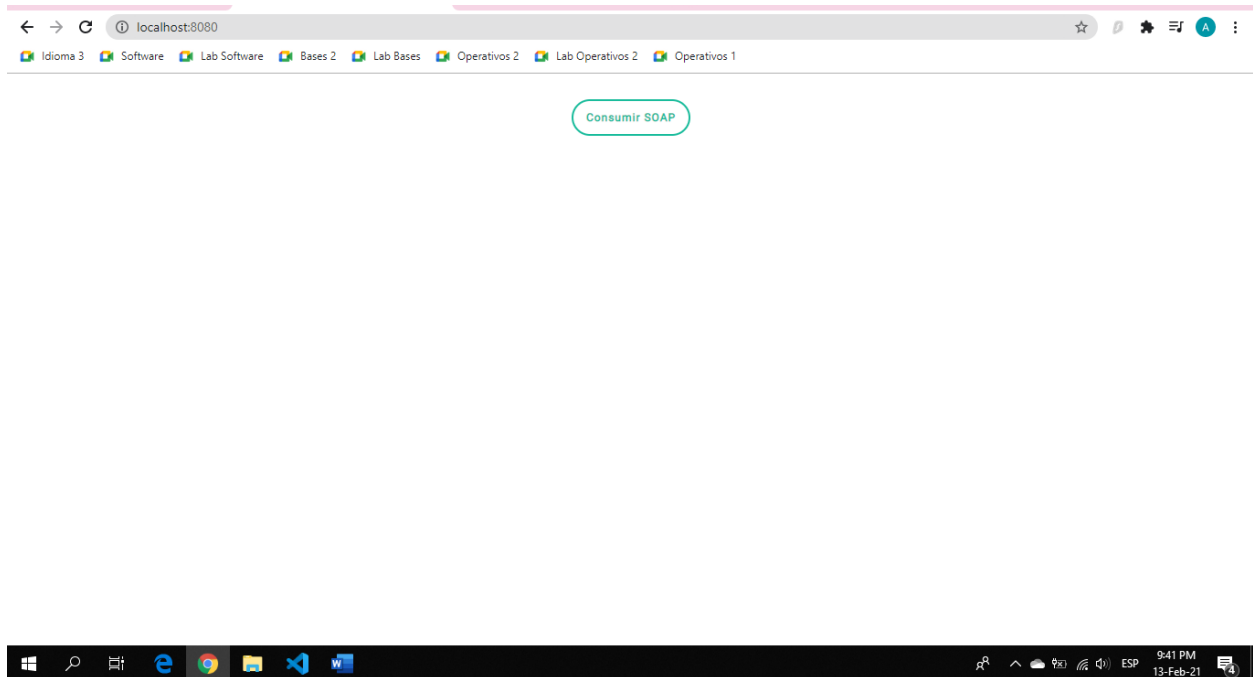
Andrea María López Flores

201404134

Guatemala, 11 de febrero de 2021

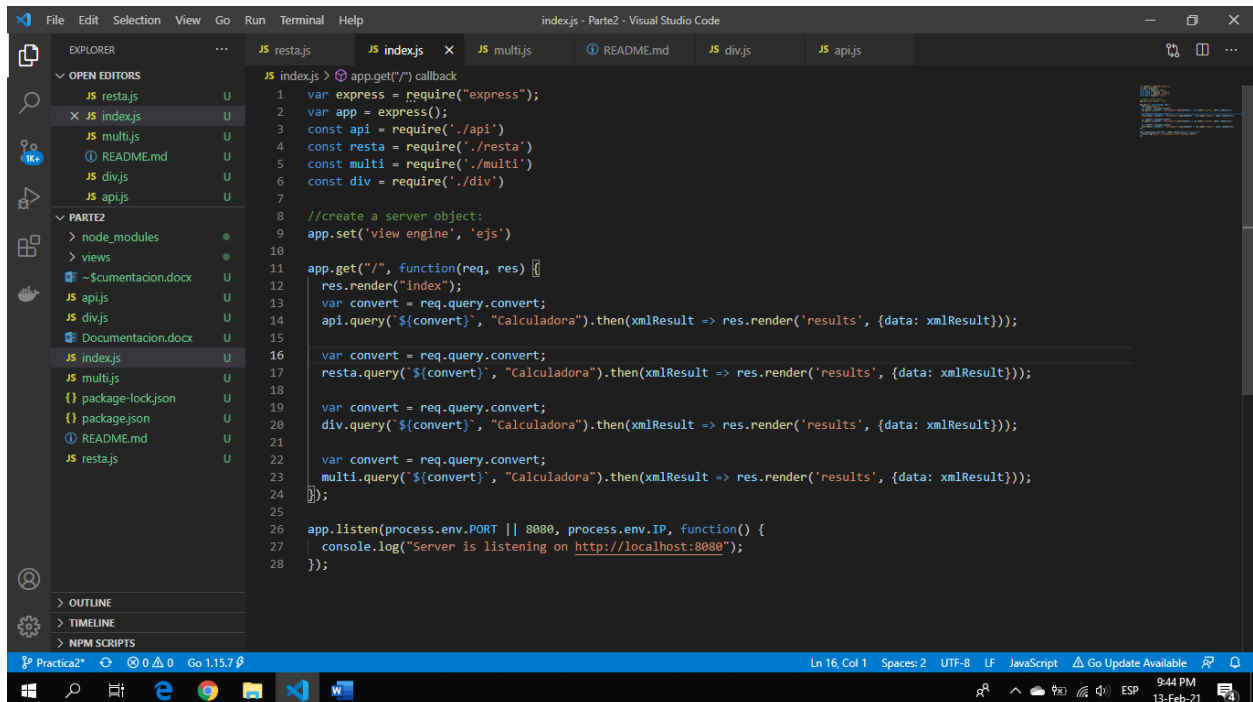
Funcionalidad

Luego de correr la aplicación con **node index.js** se debe ir a localhost:8080 y presionar el botón para que se realicen las operaciones

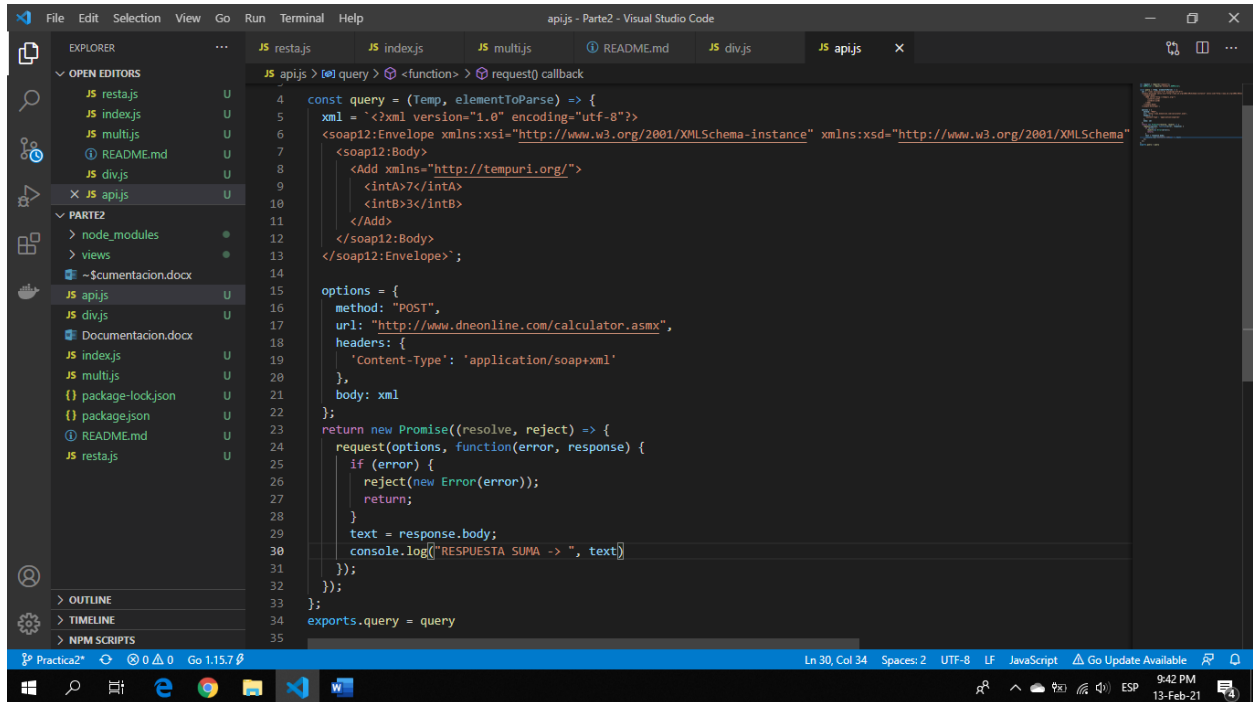


En la consola de mostrarán las respuestas de Calculator

Código de index.js



Suma Código

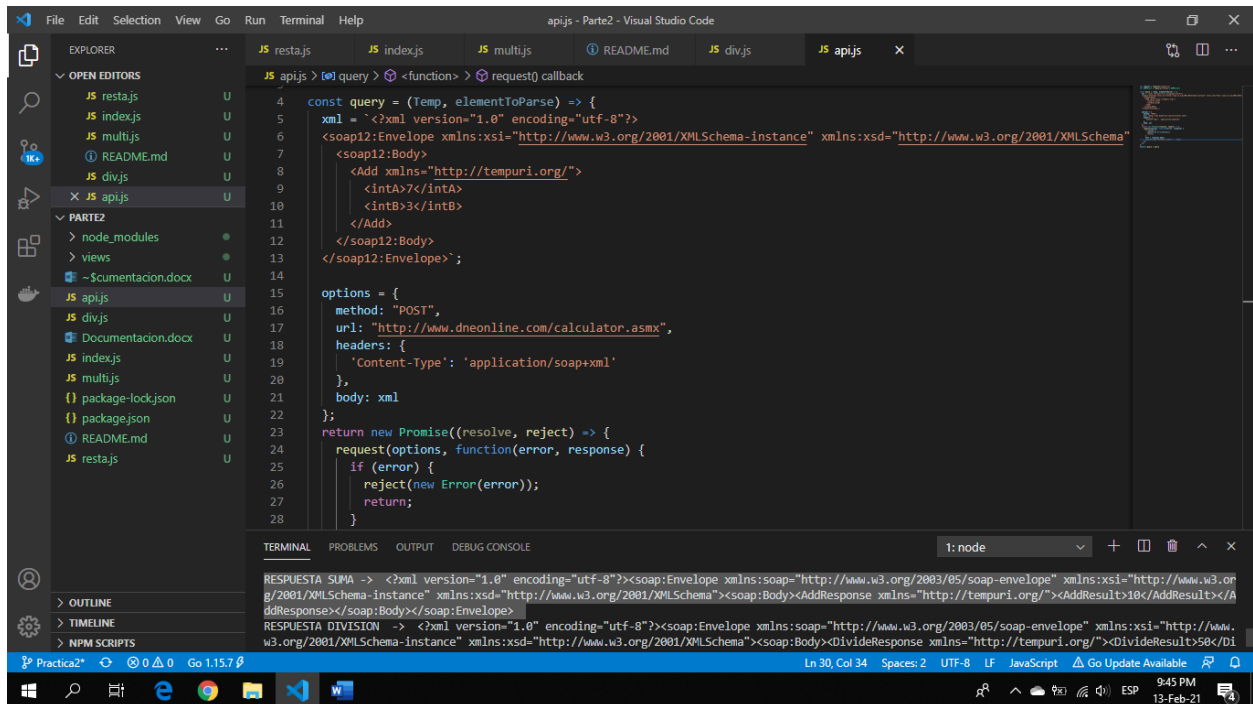


The screenshot shows the Visual Studio Code editor with the file 'apijs' open. The code is a JavaScript module that defines a query function for a SOAP request. The query function takes a request object and returns a Promise. The Promise resolves to the response body, which is then logged to the console. The code is as follows:

```
const query = (Temp, elementToParse) => {  
  xml = `<?xml version="1.0" encoding="utf-8"?>  
  <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"  
    <soap12:Body>  
      <Add xmlns="http://tempuri.org/">  
        <intA>7</intA>  
        <intB>3</intB>  
      </Add>  
    </soap12:Body>  
  </soap12:Envelope>`;
```

```
  options = {  
    method: "POST",  
    url: "http://www.dneonline.com/calculator.asmx",  
    headers: {  
      'Content-Type': 'application/soap+xml'  
    },  
    body: xml  
  };  
  return new Promise((resolve, reject) => {  
    request(options, function(error, response) {  
      if (error) {  
        reject(new Error(error));  
        return;  
      }  
      text = response.body;  
      console.log("RESPUESTA SUMA -> ", text);  
    });  
  });  
};  
exports.query = query
```

Respuesta



The screenshot shows the Visual Studio Code editor with the file 'apijs' open. The code is the same as in the previous screenshot. The terminal output shows the response of the SOAP request, which is a SOAP envelope containing the result of the addition of 7 and 3. The response is as follows:

```
RESPUESTA SUMA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><AddResponse xmlns="http://tempuri.org/"><AddResult>10</AddResult></AddResponse></soap:Body></soap:Envelope>
```

```
RESPUESTA DIVISION -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>50</DivideResult></DivideResponse></soap:Body></soap:Envelope>
```

```
TERMINAL  PROBLEMS  OUTPUT  DEBUG CONSOLE  1: node  +  [ ]  [X]  ^  X

RESPUESTA SUMA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><AddResponse xmlns="http://tempuri.org/"><AddResult>10</AddResult></AddResponse></soap:Body></soap:Envelope>
```

Resta

Código

The image shows a Visual Studio Code editor window with a REST client request defined in a file named `restajs.js`. The request is a POST to the URL `http://www.dneonline.com/calculator.asmx` with a SOAP 1.2 body. The body contains a `Subtract` operation with values 123 and 14. The response is logged to the console. The editor interface includes a sidebar with Explorer, Outline, Timeline, and NPM Scripts views. The Explorer view shows a project structure with folders like `node_modules`, `views`, and `Documentation.docx`. The Outline view shows the structure of the `restajs.js` file. The Timeline view shows the file's history. The NPM Scripts view shows the available scripts. The status bar at the bottom indicates the file is `restajs.js` at line 19, column 45, with a UTF-8 encoding and CR/LF line endings.

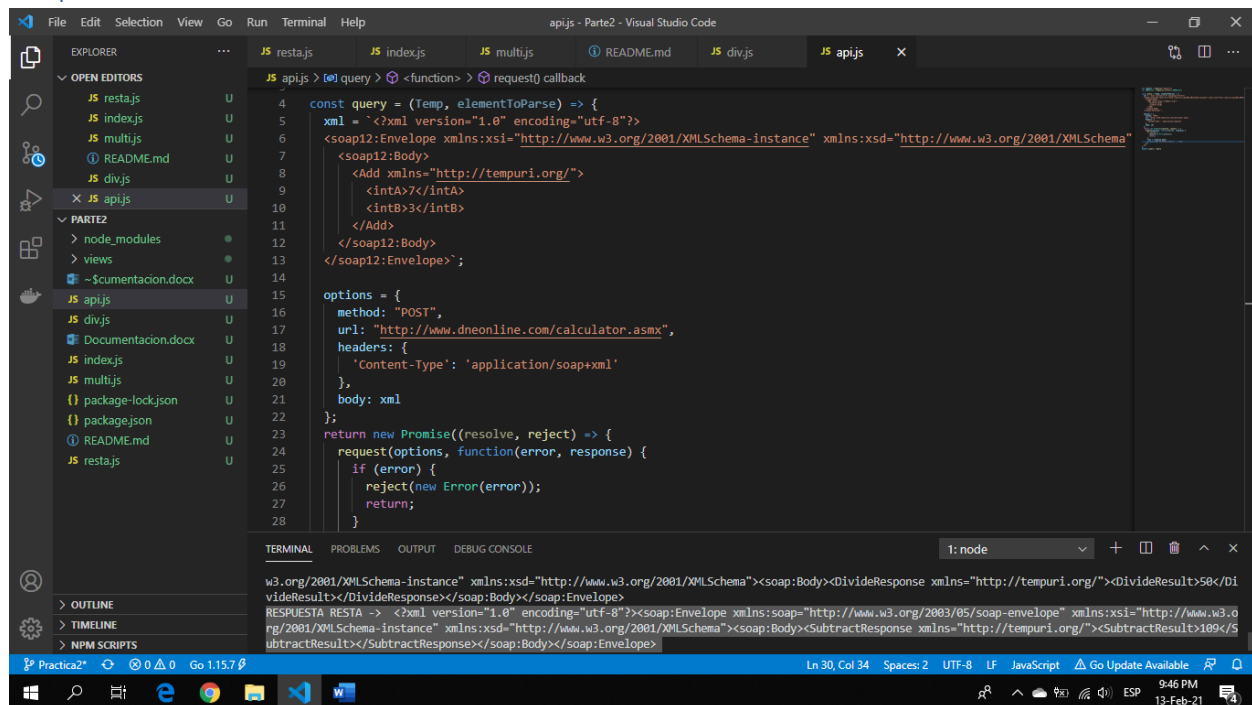
```
const query = (Temp, elementToParse) => {
  xml = `<?xml version="1.0" encoding="utf-8"?>
  <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  <soap12:Body>
    <Subtract xmlns="http://tempuri.org/">
      <intA>123</intA>
      <intB>14</intB>
    </Subtract>
  </soap12:Body>
</soap12:Envelope>`;

  options = {
    method: "POST",
    url: "http://www.dneonline.com/calculator.asmx",
    headers: {
      'Content-Type': 'application/soap+xml'
    },
    body: xml
  };
};

return new Promise((resolve, reject) => {
  request(options, function(error, response) {
    if (error) {
      reject(new Error(error));
    }
    return;
  })
  text = response.body;
  console.log("RESPUESTA RESTA -> ", text);
});
});

exports.query = query
```

Respuesta

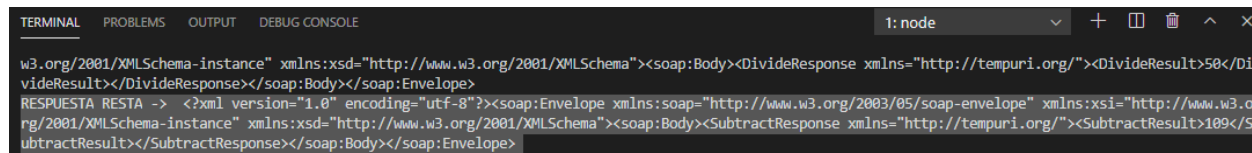


The screenshot shows the Visual Studio Code editor with the file 'apijs' open. The editor contains a REST client query for a POST request to 'http://www.dneonline.com/calculator.asmx'. The request body is an XML SOAP envelope. The terminal window shows the response, which is an XML SOAP envelope containing a 'DivideResult' element with the value '50'.

```
JS apijs > query <function> > request() callback
4 const query = (Temp, elementToParse) => {
5   xml = `<?xml version="1.0" encoding="utf-8"?>
6   <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
7     <soap12:Body>
8       <Add xmlns="http://tempuri.org/"
9         <intA>7</intA>
10        <intB>3</intB>
11      </Add>
12    </soap12:Body>
13  </soap12:Envelope>;
14
15  options = {
16    method: "POST",
17    url: "http://www.dneonline.com/calculator.asmx",
18    headers: {
19      'Content-Type': 'application/soap+xml'
20    },
21    body: xml
22  };
23  return new Promise((resolve, reject) => {
24    request(options, function(error, response) {
25      if (error) {
26        reject(new Error(error));
27      }
28    })
29  })
30}
```

TERMINAL

```
w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>50</DivideResult></DivideResponse></soap:Body></soap:Envelope>
RESPUESTA RESTA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><SubtractResponse xmlns="http://tempuri.org/"><SubtractResult>109</SubtractResult></SubtractResponse></soap:Body></soap:Envelope>
```



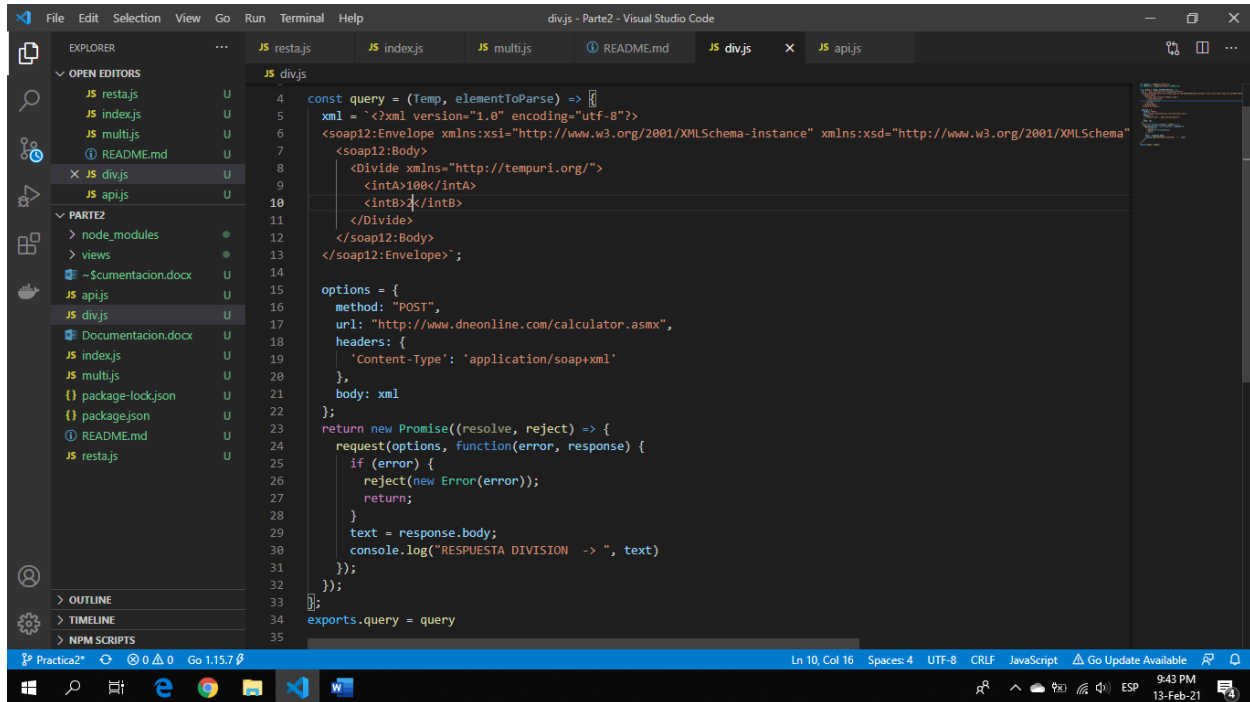
The terminal window shows the response of the REST client query. The response is an XML SOAP envelope containing a 'DivideResult' element with the value '50'.

```
TERMINAL
```

```
w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>50</DivideResult></DivideResponse></soap:Body></soap:Envelope>
RESPUESTA RESTA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><SubtractResponse xmlns="http://tempuri.org/"><SubtractResult>109</SubtractResult></SubtractResponse></soap:Body></soap:Envelope>
```

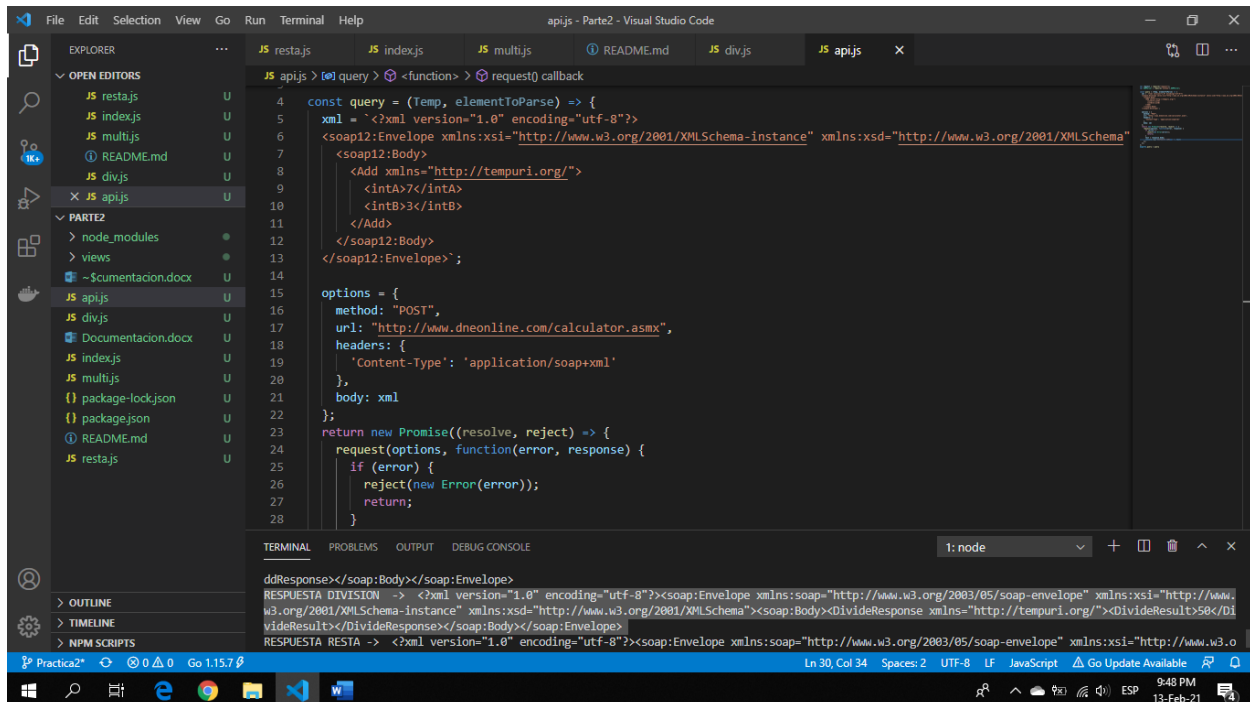
División

Código



```
const query = (Temp, elementToParse) => {  
  xml = `<?xml version="1.0" encoding="utf-8"?>  
  <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"  
    <soap12:Body>  
      <Divide xmlns="http://tempuri.org/">  
        <intA>100</intA>  
        <intB>4</intB>  
      </Divide>  
    </soap12:Body>  
  </soap12:Envelope>;  
  options = {  
    method: "POST",  
    url: "http://www.dneonline.com/calculator.asmx",  
    headers: {  
      'Content-Type': 'application/soap+xml'  
    },  
    body: xml  
  };  
  return new Promise((resolve, reject) => {  
    request(options, function(error, response) {  
      if (error) {  
        reject(new Error(error));  
        return;  
      }  
      text = response.body;  
      console.log("RESPUESTA DIVISION -> ", text)  
    });  
  });  
  exports.query = query
```

Respuesta



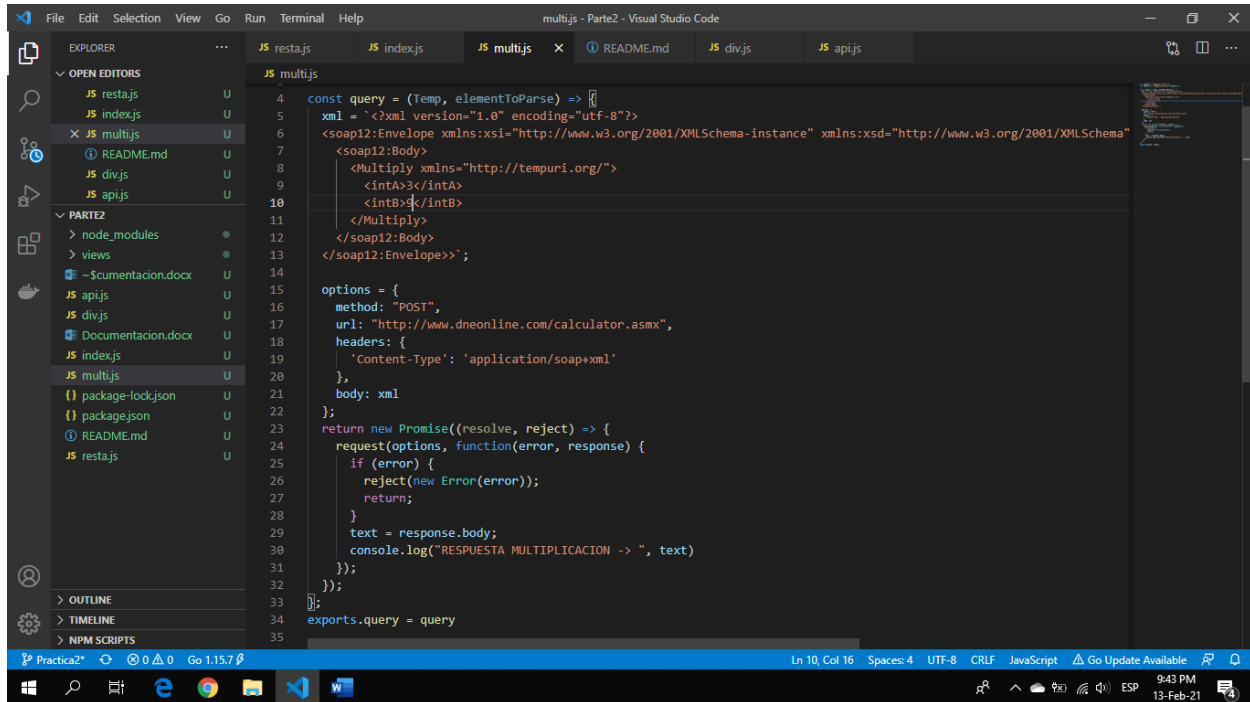
```
const query = (Temp, elementToParse) => {  
  xml = `<?xml version="1.0" encoding="utf-8"?>  
  <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"  
    <soap12:Body>  
      <Add xmlns="http://tempuri.org/">  
        <intA>7</intA>  
        <intB>3</intB>  
      </Add>  
    </soap12:Body>  
  </soap12:Envelope>;  
  options = {  
    method: "POST",  
    url: "http://www.dneonline.com/calculator.asmx",  
    headers: {  
      'Content-Type': 'application/soap+xml'  
    },  
    body: xml  
  };  
  return new Promise((resolve, reject) => {  
    request(options, function(error, response) {  
      if (error) {  
        reject(new Error(error));  
        return;  
      }  
    })  
  });  
  exports.query = query
```

```
ddResponse</soap:Body></soap:Envelope>  
RESPUESTA DIVISION -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>50</DivideResult></DivideResponse></soap:Body></soap:Envelope>  
RESPUESTA RESTA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><SubtractResponse xmlns="http://tempuri.org/"><SubtractResult>50</SubtractResult></SubtractResponse></soap:Body></soap:Envelope>
```

```
ddResponse</soap:Body></soap:Envelope>
RESPUESTA DIVISION -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>50</DivideResult></DivideResponse></soap:Body></soap:Envelope>
RESPUESTA RESTA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><SubtractResponse xmlns="http://tempuri.org/"><SubtractResult>50</SubtractResult></SubtractResponse></soap:Body></soap:Envelope>
```

Multiplicación

Código



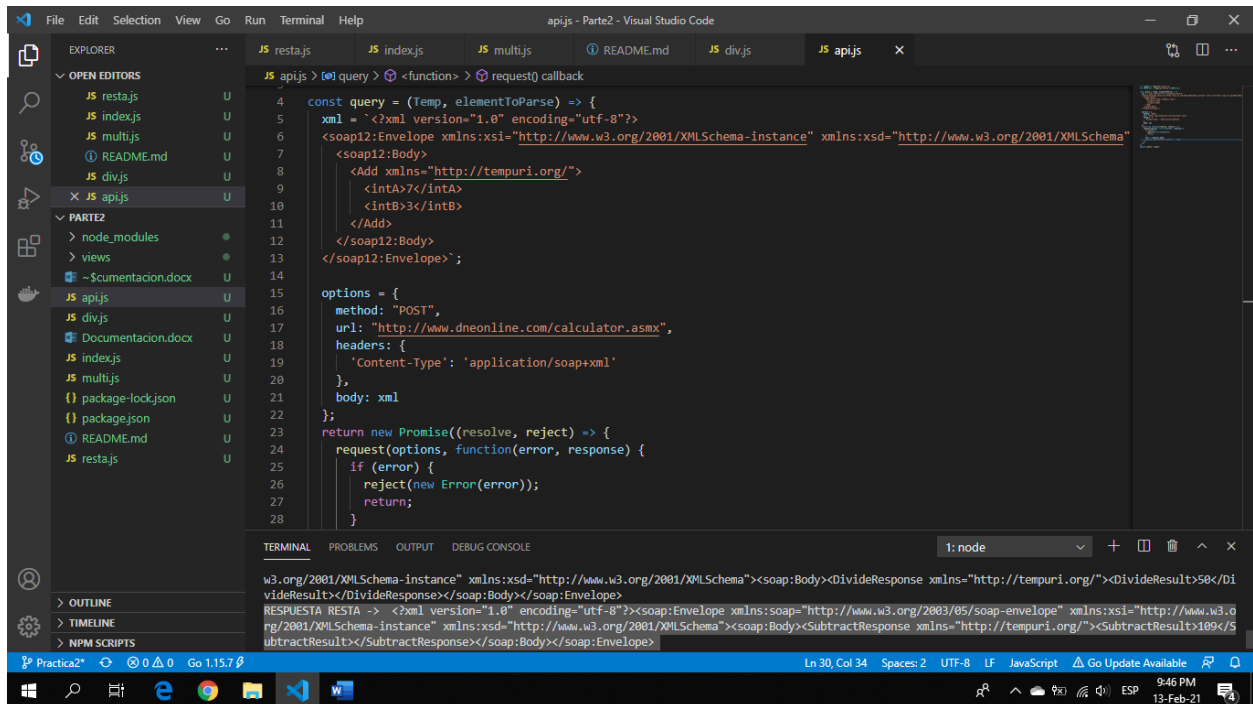
```
const query = (Temp, elementToParse) => {
  xml = `<?xml version="1.0" encoding="utf-8"?>
  <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  <soap12:Body>
    <Multiply xmlns="http://tempuri.org/"
      <intA>3</intA>
      <intB>5</intB>
    </Multiply>
  </soap12:Body>
  </soap12:Envelope>>`;

  options = {
    method: "POST",
    url: "http://www.dneonline.com/calculator.asmx",
    headers: {
      'Content-Type': 'application/soap+xml'
    },
    body: xml
  };

  return new Promise((resolve, reject) => {
    request(options, function(error, response) {
      if (error) {
        reject(new Error(error));
        return;
      }
      text = response.body;
      console.log("RESPUESTA MULTIPLICACION -> ", text);
    });
  });
};

exports.query = query
```

Respuesta

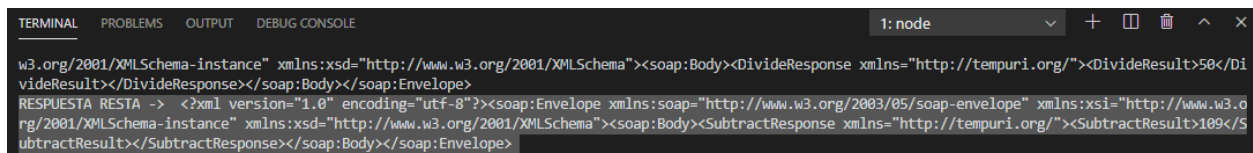


The screenshot shows the Visual Studio Code interface with a REST client request defined in `apijs`. The request is a POST to `http://www.dneonline.com/calculator.asmx` with a SOAP XML body. The response is displayed in the terminal, showing the SOAP envelope and the `<DivideResult>58</DivideResult>` value.

```
JS apijs > [0] query > <function> > request() callback
4 const query = (Temp, elementToParse) => {
5   xml = `<?xml version="1.0" encoding="utf-8"?>
6   <soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
7     <soap12:Body>
8       <Add xmlns="http://tempuri.org/"
9         <intA>7</intA>
10        <intB>3</intB>
11      </Add>
12    </soap12:Body>
13  </soap12:Envelope>;
14
15  options = {
16    method: "POST",
17    url: "http://www.dneonline.com/calculator.asmx",
18    headers: {
19      'Content-Type': 'application/soap+xml'
20    },
21    body: xml
22  };
23  return new Promise((resolve, reject) => {
24    request(options, function(error, response) {
25      if (error) {
26        reject(new Error(error));
27      }
28    })
29  });
30}
```

TERMINAL

```
w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>58</DivideResult></DivideResponse></soap:Body></soap:Envelope>
RESPUESTA RESTA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><SubtractResponse xmlns="http://tempuri.org/"><SubtractResult>109</SubtractResult></SubtractResponse></soap:Body></soap:Envelope>
```



This block shows a close-up of the terminal output from the previous screenshot, highlighting the SOAP response structure and the `<SubtractResult>109</SubtractResult>` value.

```
TERMINAL
```

```
w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><DivideResponse xmlns="http://tempuri.org/"><DivideResult>58</DivideResult></DivideResponse></soap:Body></soap:Envelope>
RESPUESTA RESTA -> <?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><SubtractResponse xmlns="http://tempuri.org/"><SubtractResult>109</SubtractResult></SubtractResponse></soap:Body></soap:Envelope>
```