

```
// Convert JSON text to JavaScript object
```

```
function convertJsonToObject() {  
    const jsonInput = document.getElementById('jsonInput').value;  
    try {  
        const jsonObject = JSON.parse(jsonInput);  
        document.getElementById('objectOutput').textContent = JSON.stringify(jsonObject, null, 2);  
    } catch (error) {  
        document.getElementById('objectOutput').textContent = 'Invalid JSON!';  
    }  
}
```

```
// Convert JSON date text to JavaScript Date object
```

```
function convertJsonToDate() {  
    const dateInput = document.getElementById('dateInput').value;  
    try {  
        const jsonDate = JSON.parse(dateInput);  
        const dateObject = new Date(jsonDate.date);  
        document.getElementById('dateOutput').textContent = `Date Object: ${dateObject}`;  
    } catch (error) {  
        document.getElementById('dateOutput').textContent = 'Invalid JSON or date format!';  
    }  
}
```

```
// Convert JSON to CSV
```

```
function convertJsonToCsv() {  
    const jsonCsvInput = document.getElementById('jsonCsvInput').value;  
    try {  
        const jsonArray = JSON.parse(jsonCsvInput);
```

```

const headers = Object.keys(jsonArray[0]);

const csvRows = [
  headers.join(','),
  ...jsonArray.map(row => headers.map(header => row[header]).join(','))
];

document.getElementById('csvOutput').textContent = csvRows.join('\n');
} catch (error) {
  document.getElementById('csvOutput').textContent = 'Invalid JSON format!';
}
}

```

// Convert CSV to JSON

```

function convertCsvToJson() {
  const csvToJsonInput = document.getElementById('csvToJsonInput').value;
  const lines = csvToJsonInput.split('\n');
  const headers = lines[0].split(',');
  const jsonArray = lines.slice(1).map(line => {
    const values = line.split(',');
    return headers.reduce((object, header, index) => {
      object[header] = values[index];
      return object;
    }, {});
  });
  document.getElementById('jsonOutput').textContent = JSON.stringify(jsonArray, null, 2);
}

```

// Create a hash using crypto module

// Create a hash using the Web Crypto API (SHA-256)

```
async function createHash() {  
  const hashInput = document.getElementById('hashInput').value;  
  const encoder = new TextEncoder();  
  const data = encoder.encode(hashInput);  
  
  // Use the Web Crypto API to generate a hash  
  const hashBuffer = await crypto.subtle.digest('SHA-256', data);  
  
  // Convert hash buffer to hex string  
  const hashArray = Array.from(new Uint8Array(hashBuffer));  
  const hashHex = hashArray.map(b => b.toString(16).padStart(2, '0')).join("");  
  
  document.getElementById('hashOutput').textContent = `Hash: ${hashHex}`;  
}
```