JS: Simple PROLOG interpreter

prolog.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Mini Prolog IDE (Tau Prolog)</title>
  <script
src="https://cdn.jsdelivr.net/npm/tau-
prolog@0.3.1/modules/core.js"></script>
  <script
src="https://cdn.jsdelivr.net/npm/tau-
prolog@0.3.1/modules/lists.js"></script>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
      background: #f5f5f5;
    }

    .container {
      display: flex;
      height: 100vh;
    }

    .left, .right {
      padding: 20px;
      box-sizing: border-box;
    }

    .left {
      width: 50%;
      background: #ffffff;
      border-right: 1px solid #ccc;
    }

    .right {
      width: 50%;
      display: flex;
      flex-direction: column;
      gap: 20px;
    }

    .section {
      background: white;
      padding: 15px;
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      border-radius: 8px;
      box-shadow: 0 2px 5px rgba(0,0,0,0.1);
      flex: 1;
      display: flex;
      flex-direction: column;
    }

    textarea {
      width: 100%;
      height: 100%;
      font-family: monospace;
      resize: none;
    }

    button {
      padding: 10px 20px;
      font-size: 16px;
      margin-top: 10px;
      align-self: flex-start;
    }

    #output {
      background: #eaeaea;
      padding: 10px;
      white-space: pre-wrap;
      overflow-y: auto;
      flex: 1;
    }

  </style>
</head>
<body>
<p> Wanna know how it's made? <a href="">wiki.ostrowski.net.pl</a></p>
  <div class="container">
    <div class="left section">
      <h2>Prolog Facts and Rules</h2>
      <textarea id="program" placeholder="e.g. parent(john,
mary)."></textarea>
    </div>

    <div class="right">
      <div class="section">
        <h2>Query</h2>
        <textarea id="query" placeholder="e.g. parent(john,
X)."></textarea>
        <button onclick="runQuery()">Run</button>
      </div>
      <div class="section">
        <h2>Results</h2>
        <div id="output"></div>
      </div>
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  </div>
</div>

<script>
  pl.module("lists");

  function replacePolishChars(text) {
    const map = {
      'ą': 'a', 'ć': 'c', 'ę': 'e', 'ł': 'l',
      'ń': 'n', 'ó': 'o', 'ś': 's', 'ż': 'z', 'ź': 'z',
      'Ą': 'A', 'Ć': 'C', 'Ę': 'E', 'Ł': 'L',
      'Ń': 'N', 'Ó': 'O', 'Ś': 'S', 'Ż': 'Z', 'Ź': 'Z'
    };
    return text.replace(/[ąćęłńóśżźĄĆĘŁŃÓŚŻŹ]/g, c => map[c] || c);
  }

  function runQuery() {
    const rawProgram = document.getElementById("program").value;
    const rawQuery = document.getElementById("query").value;
    const outputDiv = document.getElementById("output");

    const program = replacePolishChars(rawProgram);
    const query = replacePolishChars(rawQuery);

    outputDiv.innerText = "Running...";

    const session = pl.create(1000);
    session.consult(program, {
      success: function () {
        session.query(query, {
          success: function () {
            let results = "";
            session.answers(answer => {
              if (answer === false) {
                results += "No.\n";
                outputDiv.innerText = results;
              } else if (pl.type.is_error(answer)) {
                results += "Error: " + answer.args[0].id + "\n";
                outputDiv.innerText = results;
              } else {
                results += session.format_answer(answer) + "\n";
                outputDiv.innerText = results;
              }
            });
          },
          error: function (err) {
            outputDiv.innerText = "Query error: " + err;
          }
        });
      },
      error: function (err) {
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          outputDiv.innerText = "Program error: " + err;
        }
      });
    }
  </script>

</body>
</html>
```