

FERIT

LV1 – Vizualizacija podataka

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1. Zadatak

```
<!DOCTYPE html>
<html>
  <head>
    <script src="http://d3js.org/d3.v7.min.js" charset="utf-8"></script>
  </head>
  <body>
    <script>
      d3.select("body")
        .append("h1")
        .html("Naslov dokumenta");

      var div1 = d3.select("body")
        .append("div");

      div1.append("h2")
        .html("Podnaslov 1");

      div1.append("p")
        .html("Tekst 1.");

      var div2 = d3.select("body")
        .append("div");

      div2.append("h2")
        .html("Podnaslov 2");

      div2.append("p")
        .html("Tekst 2.");
    </script>
  </body>
</html>
```

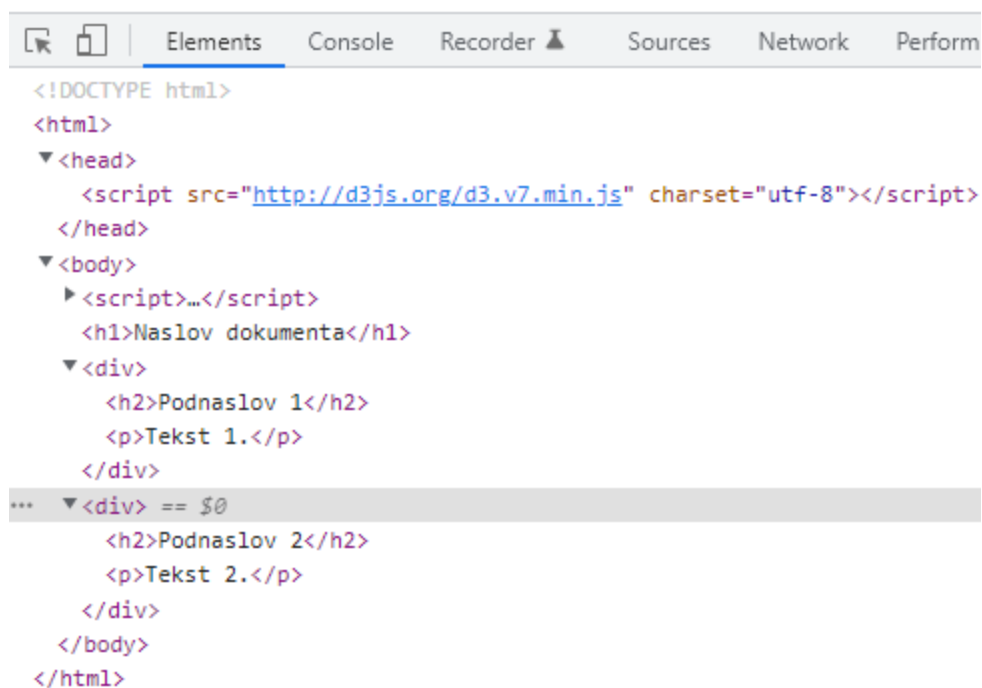
Naslov dokumenta

Podnaslov 1

Tekst 1.

Podnaslov 2

Tekst 2.



The screenshot shows the 'Elements' panel of a web browser's developer tools. The HTML structure is as follows:

```
<!DOCTYPE html>
<html>
  <head>
    <script src="http://d3js.org/d3.v7.min.js" charset="utf-8"></script>
  </head>
  <body>
    <script>...</script>
    <h1>Naslov dokumenta</h1>
    <div>
      <h2>Podnaslov 1</h2>
      <p>Tekst 1.</p>
    </div>
    <div == $0
      <h2>Podnaslov 2</h2>
      <p>Tekst 2.</p>
    </div>
  </body>
</html>
```

The 'Podnaslov 2' element is currently selected, indicated by a grey highlight and the text '== \$0'.

2. Zadatak

```
const paragraphText = ['Novi Text 1!', 'Novi Text 2!'];
d3.selectAll('p')
  .data(paragraphText)
  .html(d=>d);

const divID = ['ID1', 'ID2'];
d3.selectAll('div')
  .data(divID)
  .attr("id", d=>d);
```

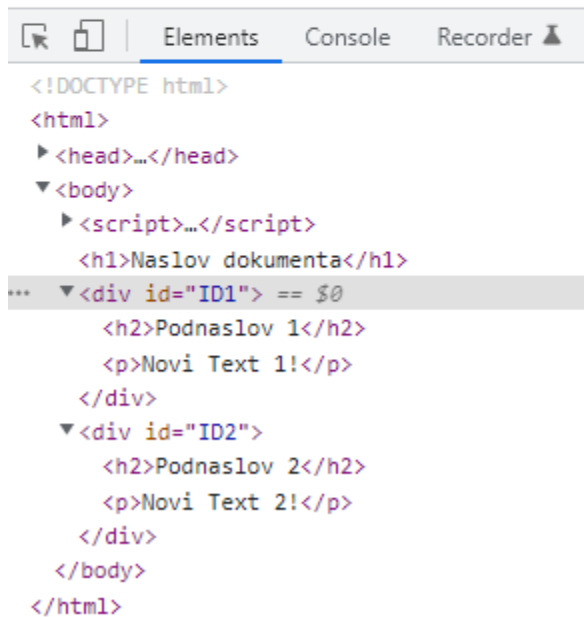
Naslov dokumenta

Podnaslov 1

Novi Text 1!

Podnaslov 2

Novi Text 2!



3. Zadatak

```
<!DOCTYPE html>
<html>
  <head>
    <script src="http://d3js.org/d3.v7.min.js" charset="utf-8"></script>
  </head>
  <body>
    <script>
      const h2Text = ['Podnaslov 1!', 'Podnaslov 2!', 'Podnaslov 3!',
        'Podnaslov 4!', 'Podnaslov 5!', 'Podnaslov 6!', 'Podnaslov 7!', 'Podnaslov
        8!', 'Podnaslov 9!', 'Podnaslov 10!'];
      const paragraphText = ['Text 1!', 'Text 2!', 'Text 3!', 'Text
        4!', 'Text 5!', 'Text 6!', 'Text 7!', 'Text 8!', 'Text 9!', 'Text 10!'];
      const divID = ['ID1', 'ID2', 'ID3', 'ID4', 'ID5', 'ID6', 'ID7',
        'ID8', 'ID9', 'ID10'];

      d3.select('body')
        .selectAll('div')
        .data(divID)
        .enter()
        .append('div')
        .attr("id", d=>d);

      d3.selectAll('div')
        .data(h2Text)
        .append('h2')
        .html(d=>d);

      d3.selectAll('div')
        .data(paragraphText)
        .append('p')
        .html(d=>d);
    </script>
  </body>
</html>
```

Podnaslov 1!

Text 1!

Podnaslov 2!

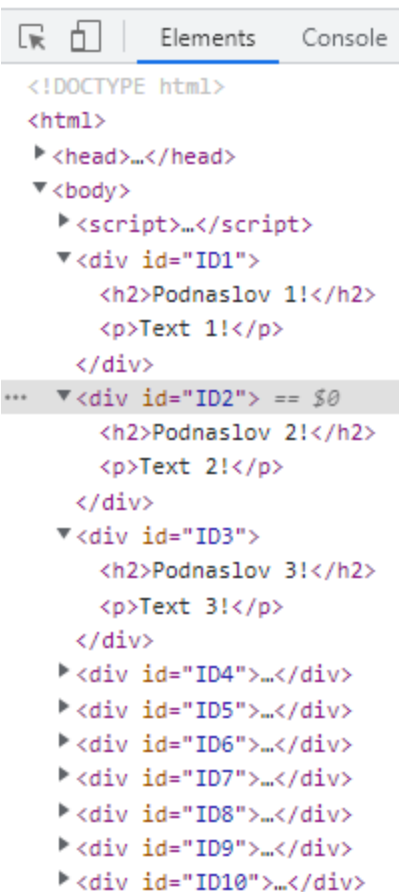
Text 2!

Podnaslov 3!

Text 3!

Podnaslov 4!

Text 4!



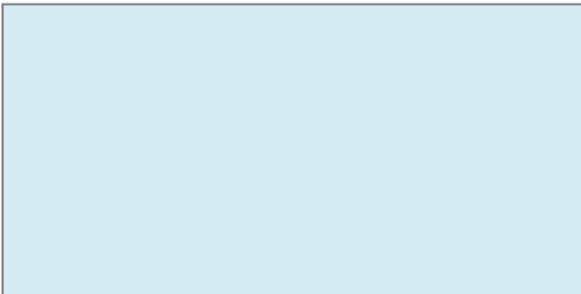
```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <script>...</script>
    <div id="ID1">
      <h2>Podnaslov 1!</h2>
      <p>Text 1!</p>
    </div>
    <div id="ID2"> == $0
      <h2>Podnaslov 2!</h2>
      <p>Text 2!</p>
    </div>
    <div id="ID3">
      <h2>Podnaslov 3!</h2>
      <p>Text 3!</p>
    </div>
    <div id="ID4">...</div>
    <div id="ID5">...</div>
    <div id="ID6">...</div>
    <div id="ID7">...</div>
    <div id="ID8">...</div>
    <div id="ID9">...</div>
    <div id="ID10">...</div>
```

4. Zadatak

```
<!DOCTYPE html>
<html>
  <head>
    <script src="http://d3js.org/d3.v3.min.js" charset="utf-8"></script>
  </head>
  <body>
    <h1>SVG</h1>
    <script>
      var svg = d3.select("body")
        .append("svg")

      svg.append("rect")
        .attr("width", "300")
        .attr("height", "400")
        .attr("style", "stroke:black; stroke-width:1; fill:lightblue;
fill-opacity:50%; stroke-opacity:100%");
    </script>
  </body>
</html>
```

SVG



5. Zadatak

```
<!DOCTYPE html>
<html>
  <head>
    <script src="http://d3js.org/d3.v3.min.js" charset="utf-8"></script>
  </head>
  <body>
    <h1>SVG</h1>
    <script>
      var svg = d3.select("body")
        .append("svg")
        .attr("width", "1000")
        .attr("height", "1000");

      svg.append("circle")
        .attr("cx", "100")
        .attr("cy", "100")
        .attr("r", "80")
        .attr("style", "stroke:lightblue; fill-opacity:0%; stroke-
width:4;");

      svg.append("circle")
        .attr("cx", "300")
        .attr("cy", "100")
        .attr("r", "80")
        .attr("style", "stroke:black; fill-opacity:0%; stroke-width:4;");

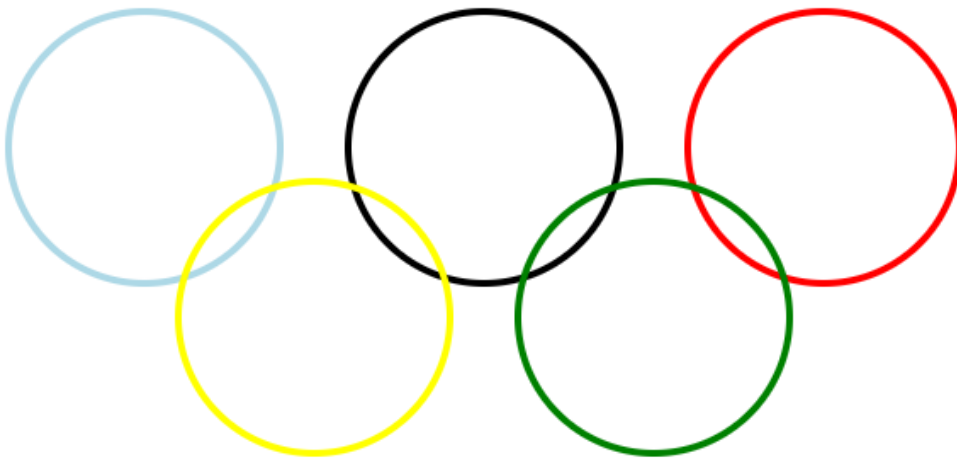
      svg.append("circle")
        .attr("cx", "500")
        .attr("cy", "100")
        .attr("r", "80")
        .attr("style", "stroke:red; fill-opacity:0%; stroke-width:4;");

      svg.append("circle")
        .attr("cx", "200")
        .attr("cy", "200")
        .attr("r", "80")
        .attr("style", "stroke:yellow; fill-opacity:0%; stroke-width:4;");

      svg.append("circle")
        .attr("cx", "400")
        .attr("cy", "200")
        .attr("r", "80")
        .attr("style", "stroke:green; fill-opacity:0%; stroke-width:4;");

    </script>
  </body>
</html>
```

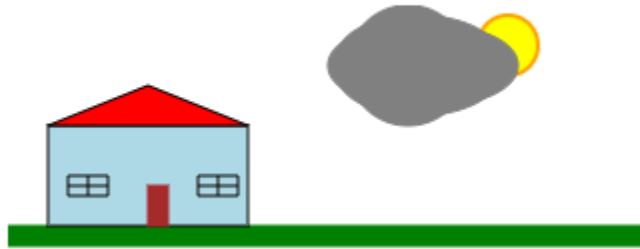
SVG



```
<!DOCTYPE html>
<html>
  <head>...</head>
  ... <body> == $0
    <h1>SVG</h1>
    <script>...</script>
    <svg width="1000" height="1000">
      <circle cx="100" cy="100" r="80" style="stroke:lightblue; fill-opacity:0%; stroke-width:4;"></circle>
      <circle cx="300" cy="100" r="80" style="stroke:black; fill-opacity:0%; stroke-width:4;"></circle>
      <circle cx="500" cy="100" r="80" style="stroke:red; fill-opacity:0%; stroke-width:4;"></circle>
      <circle cx="200" cy="200" r="80" style="stroke:yellow; fill-opacity:0%; stroke-width:4;"></circle>
      <circle cx="400" cy="200" r="80" style="stroke:green; fill-opacity:0%; stroke-width:4;"></circle>
    </svg>
  </body>
</html>
```


6. Zadatka

HOME



```
<!DOCTYPE html>
<html>
  <head>
    <script src="http://d3js.org/d3.v3.min.js" charset="utf-8"></script>
  </head>
  <body>
    <h1>HOME</h1>
    <script>
      var svg = d3.select("body")
        .append("svg");

      svg.append("circle")
        .attr("cx", "250")
        .attr("cy", "20")
        .attr("r", "15")
        .attr("style", "stroke:orange; fill:yellow; fill-opacity:100%;
stroke-width:2;");

      svg.append("rect")
        .attr("x", "0")
        .attr("y", "110")
        .attr("width", "320")
        .attr("height", "10")
        .attr("style", "stroke:green; stroke-width:1; fill:green;");

      svg.append("rect")
        .attr("x", "20")
        .attr("y", "60")
        .attr("width", "100")
        .attr("height", "50")
        .attr("style", "stroke:black; stroke-width:1; fill:lightblue;");
```

```
svg.append("line")
    .attr("x1", "30")
    .attr("x2", "50")
    .attr("y1", "95")
    .attr("y2", "95")
    .attr("style","stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "30")
    .attr("x2", "50")
    .attr("y1", "85")
    .attr("y2", "85")
    .attr("style","stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "30")
    .attr("x2", "50")
    .attr("y1", "90")
    .attr("y2", "90")
    .attr("style","stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "40")
    .attr("x2", "40")
    .attr("y1", "85")
    .attr("y2", "95")
    .attr("style","stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "30")
    .attr("x2", "30")
    .attr("y1", "85")
    .attr("y2", "95")
    .attr("style","stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "50")
    .attr("x2", "50")
    .attr("y1", "85")
    .attr("y2", "95")
    .attr("style","stroke:black; stroke-width:1; fill:black;")

svg.append("rect")
    .attr("x", "70")
    .attr("y", "90")
    .attr("width","10")
    .attr("height","20")
    .attr("style","stroke:brown; stroke-width:1; fill:brown;");

svg.append("polygon")
    .attr("points", "20, 60 120, 60 70,40")
    .attr("style","stroke:black; stroke-width:1; fill:red;");
```

```
svg.append("line")
    .attr("x1", "95")
    .attr("x2", "115")
    .attr("y1", "95")
    .attr("y2", "95")
    .attr("style", "stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "95")
    .attr("x2", "115")
    .attr("y1", "85")
    .attr("y2", "85")
    .attr("style", "stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "95")
    .attr("x2", "115")
    .attr("y1", "90")
    .attr("y2", "90")
    .attr("style", "stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "105")
    .attr("x2", "105")
    .attr("y1", "85")
    .attr("y2", "95")
    .attr("style", "stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "95")
    .attr("x2", "95")
    .attr("y1", "85")
    .attr("y2", "95")
    .attr("style", "stroke:black; stroke-width:1; fill:black;")

svg.append("line")
    .attr("x1", "115")
    .attr("x2", "115")
    .attr("y1", "85")
    .attr("y2", "95")
    .attr("style", "stroke:black; stroke-width:1; fill:black;")

svg.append("ellipse")
    .attr("cx", "200")
    .attr("cy", "30")
    .attr("rx", "40")
    .attr("ry", "20")
    .attr("style", "stroke:gray; fill:gray; fill-opacity:100%;
stroke-width:1;");
```

```
        svg.append("ellipse")
            .attr("cx", "205")
            .attr("cy", "35")
            .attr("rx", "40")
            .attr("ry", "20")
            .attr("style", "stroke:gray; fill:gray; fill-opacity:100%;
stroke-width:1;");

        svg.append("ellipse")
            .attr("cx", "205")
            .attr("cy", "25")
            .attr("rx", "40")
            .attr("ry", "20")
            .attr("style", "stroke:gray; fill:gray; fill-opacity:100%;
stroke-width:1;");

        svg.append("ellipse")
            .attr("cx", "215")
            .attr("cy", "30")
            .attr("rx", "40")
            .attr("ry", "20")
            .attr("style", "stroke:gray; fill:gray; fill-opacity:100%;
stroke-width:1;");

        svg.append("ellipse")
            .attr("cx", "200")
            .attr("cy", "30")
            .attr("rx", "30")
            .attr("ry", "30")
            .attr("style", "stroke:gray; fill:gray; fill-opacity:100%;
stroke-width:1;");

    </script>
</body>
</html>
```