

```

1 <html>
2
3 <head>
4   <title>Todo Application</title>
5   <script type="text/javascript" src="A4.js"></script>
6   <script
7     src="https://ajax.googleapis.com/ajax/libs/jquery/2.2.0/jquery.min.js">
8   </script>
9   <link rel="stylesheet" type="text/css"
10     href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-alpha.2/css/bootstrap.min.css">
11   <link rel="stylesheet" type="text/css" href="A4.css">
12 </head>
13
14 <body>
15   <div class="container">
16     <div class="jumbotron text-center">
17       <h1>Tank Wars Console</h1>
18     </div>
19   </div>
20   <div class="container">
21     <input type="text" placeholder="enter encoded command"
22       id="encodedCommand">
23
24     <button type="button" onclick="localDecode()">Local Decode</button>
25
26     <button type="button" onclick="serverDecode()">Server Decode</button>
27   </div>
28
29   <br>
30
31   <div class="container">
32     <div class="boxed" id="decodedCode" placeholder="Decoded command
33       appears here.">
34       Decoded command will appear here.
35     </div>
36   </div>
37
38 </body>
39
40 </html>

```

```

1 function localDecode(){
2
3   var encodedCommand = document.getElementById("encodedCommand").value;
4   var re = /(t[0-9]+).*(s|go)/;
5   var matchlist = re.exec(encodedCommand);
6   var output;
7   var tank = matchlist[1];
8   var command = matchlist[2];
9
10  //matching go command
11  if (command == "s") {
12
13    out = tank + " " + command;
14
15  } else {
16
17    re = /(t\d+).*(go).*(\d+).*(\d+)/;
18
19    matchlist = re.exec(encodedCommand);
20    var c1 = matchlist[3];
21    var c2 = matchlist[4];
22    out = tank + " " + command + " " + c1 + " " + c2;
23  }
24
25  document.getElementById("decodedCode").innerHTML = out;
26  };
27
28 function serverDecode() {
29   var encodedCommand = document.getElementById("encodedCommand").value;
30   var data = $.getJSON(
31     "A2server.py", {
32       msg : encodedCommand
33     },
34     function (data) {
35       command = data["command"];
36       document.getElementById("decodedCode").innerHTML = command;
37     }
38   );
39 }

```

Tank Wars Console

t45 go 34 12

Tank Wars Console

t69 s

```

1  #!/usr/bin/env python
2  import cgi
3  import json
4  import re
5
6  import cgitb
7  cgitb.enable()
8
9  print "Content-Type: text/json\n"
10
11  parmDict = cgi.FieldStorage()
12
13  encodedCommand = parmDict['msg'].value
14
15  def getDecodedCommand(encodedCommand):
16
17      # matching go command
18      if re.search(r'(t[0-9]+).*\D*(\d+)?\D*(\d+)?', encodedCommand):
19          # actually extract tuples
20          inputString = re.findall(r'(t[0-9]+).*\D*(\d+)?\D*(\d+)?',
21                                  encodedCommand)
22          # convert list of tuples to string
23          convertedString = (" ".join("%s %s %s %s" % tup for tup in inputString))
24
25      # matching stop command
26      elif re.search(r'(t[0-9]+).*\D*(s)', encodedCommand):
27          # actually extract tuples
28          inputString = re.findall(r'(t[0-9]+).*\D*(s)', encodedCommand)
29          # convert list of tuples to string
30          convertedString = (" ".join("%s %s" % tup for tup in inputString))
31
32      return convertedString
33
34  for element in range(0, len(encodedCommand)):
35      command = getDecodedCommand(encodedCommand)
36
37      data = {"command": command}
38
39      json_data = json.dumps(data)
40
41      print json_data

```

```

1  h1 {
2      text-align: center;
3  }
4
5  #decodedCode {
6      border: 1em solid gainsboro;
7      text-align: center;
8  }
9

```



```
{"command": "t45 go 435 12"}
```

Tank Wars Console

t31 go 76 12

Lorsen February 15, 2016

Tank Wars Console

t67 s

Lorsen February 15, 2016