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1  grammar MyLanguage;
2
3  @header {
4      import java.io.*;
5      import java.net.URL;
6      import java.nio.charset.Charset;
7  }
8
9  @parser::members {
10     final private static String public_url = "http://lyle.smu.edu/~prestont/" +
11         "3342/dataService.php";
12     private static String setIdKeyVal(String id, String key, String val) {
13         return readFromUrl(public_url + "?id=" + id + "&key=" + key +
14             "&val=" + val);
15     }
16     private static String getIdKey(String id, String key) {
17         return readFromUrl(public_url + "?id=" + id + "&key=" + key);
18     }
19     private static String getId(String id) {
20         return readFromUrl(public_url + "?id=" + id);
21     }
22     private static String getDatabase() {
23         return readFromUrl(public_url);
24     }
25     private static String readFromUrl(String url) {
26         try {
27             InputStream is = new URL(url).openStream();
28             BufferedReader rd = new BufferedReader(
29                 new InputStreamReader(is, Charset.forName("UTF-8")));
30             StringBuilder sb = new StringBuilder();
31             int cp;
32             while ((cp = rd.read()) != -1) {
33                 sb.append((char) cp);
34             }
35             return sb.toString();
36         } catch (Exception e) {
37             System.out.println("Exception thrown : " + e);
38             return "";
39         }
40     }
41 }
42
43 root_rule : (set_id_key_val | get_id_key | get_id | get_database) ;
44 set_id_key_val : 'Hey, let me tell you that ' id=ITEM ' has a ' key=ITEM
45     ' of ' val=ITEM { System.out.println(

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46             setIdKeyVal($id.text,$key.text,$val.text)
47         );
48     } ;
49 get_id_key : 'Do you know ' id=ITEM '\s ' key=ITEM '?' {
50     System.out.println(getIdKey($id.text,$key.text)); } ;
51 get_id : 'What\s the scoop on ' id=ITEM '?' {
52     System.out.println(getId($id.text)); } ;
53 get_database : 'What do we know?' { System.out.println(getDatabase()); } ;
54
55 ITEM : [a-zA-Z][a-zA-Z_$0-9]+ ;
56 WS : [ \t\r\n]+ -> skip ;
```