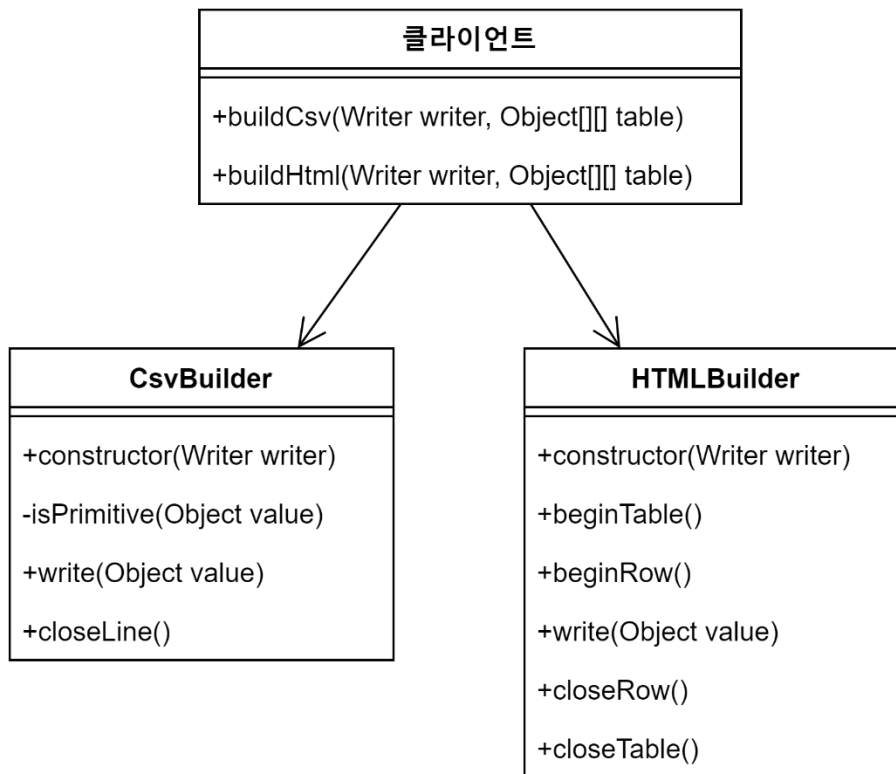


1) 개요



2) CsvBuilder.java

```
1 package builder.e3;
2
3 import java.io.IOException;
4 import java.io.Writer;
5 import java.util.HashSet;
6 import java.util.Set;
7
8 public class CsvBuilder {
9
10     private static Set<Class<?>> primitiveTypes = new HashSet<Class<?>>();
11     private boolean newLine = true;
12     private Writer writer;
13
14     public CsvBuilder(Writer writer) {
15         this.writer = writer;
16     }
17
18     static {
19         primitiveTypes.add(Boolean.class);
20         primitiveTypes.add(Character.class);
21         primitiveTypes.add(Byte.class);
22         primitiveTypes.add(Short.class);
23         primitiveTypes.add(Integer.class);
24         primitiveTypes.add(Long.class);
25         primitiveTypes.add(Float.class);
26         primitiveTypes.add(Double.class);
27     }
28
29     private static boolean isPrimitive(Object value) {
30         return primitiveTypes.contains(value.getClass());
31     }
32
33     public void write(Object value) throws IOException {
34         if (newLine)
35             newLine = false;
36         else
37             writer.write(",");
38
39         if (isPrimitive(value))
40             writer.write(value.toString());
41         else {
42             writer.write("W");
43             writer.write(value.toString().replace("W", "WWW"));
44             writer.write("W");
45         }
46     }
47
48     public void closeLine() throws IOException {
49         writer.write("Wn");
50         newLine = true;
51     }
52
53 }
```

3) HtmlBuilder.java

```
1 package builder.e3;
2
3 import java.io.IOException;
4 import java.io.Writer;
5
6 public class HtmlBuilder {
7
8     private Writer writer;
9
10    public HtmlBuilder(Writer writer) {
11        this.writer = writer;
12    }
13
14    public void beginTable() throws IOException {
15        writer.write("<table>\\n");
16    }
17
18    public void beginRow() throws IOException {
19        writer.write("<tr>");
20    }
21
22    public void write(Object value) throws IOException {
23        writer.write("<td>");
24        writer.write(value.toString());
25        writer.write("</td>");
26    }
27
28    public void closeRow() throws IOException {
29        writer.write("</tr>\\n");
30    }
31
32    public void closeTable() throws IOException {
33        writer.write("</table>\\n");
34    }
35 }
```

4) Example3.java

```
1 package builder.e3;
2
3 import java.io.IOException;
4 import java.io.PrintWriter;
5 import java.io.Writer;
6
7 public class Example3 {
8
9     static void buildCsv(Writer writer, Object[][] data) throws IOException {
10         CsvBuilder builder = new CsvBuilder(writer);
11         for (Object[] record : data) {
12             for (Object field : record)
13                 builder.write(field);
14             builder.closeLine();
15         }
16     }
17
18     static void buildHtml(Writer writer, Object[][] data) throws IOException {
19         HtmlBuilder builder = new HtmlBuilder(writer);
20         builder.beginTable();
21         for (Object[] record : data) {
22             builder.beginRow();
23             for (Object field : record)
24                 builder.write(field);
25             builder.closeRow();
26         }
27         builder.closeTable();
28     }
29
30     public static void main(String[] args) throws IOException {
31         Object[][] data = {
32             { "tom", 24, "910614-1488111", "02-333-4444" },
33             { "john", 28, "870320-1434123", "02-444-5555" },
34             { "smith", 25, "901105-1300234", "02-555-6666" }
35         };
36         Writer writer = new PrintWriter(System.out, true);
37         buildCsv(writer, data);
38         buildHtml(writer, data);
39         writer.close();
40     }
41 }
42 }
```

출력

```
"tom",24,"910614-1488111","02-333-4444"
"john",28,"870320-1434123","02-444-5555"
"smith",25,"901105-1300234","02-555-6666"
<table>
<tr><td>tom</td><td>24</td><td>910614-1488111</td><td>02-333-4444</td></tr>
<tr><td>john</td><td>28</td><td>870320-1434123</td><td>02-444-5555</td></tr>
<tr><td>smith</td><td>25</td><td>901105-1300234</td><td>02-555-6666</td></tr>
</table>
```