```
1 package Gastkomponente;
2
3 import static Utilities.InvalidEmailException.throwNewInvalidEmailException;
4
5
6 public final class EmailTyp {
7
8     private String name;
9     private String server;
10    private String country;
11
12    private EmailTyp(String name, String server, String country) throws InvalidEmailException {
13        assertValidEmail(name, server, country);
14        this.name = name;
15        this.server = server;
16        this.country = country;
17    }
18
19    public static EmailTyp email(String name, String server, String country) throws
   InvalidEmailException {
20        return new EmailTyp(name, server, country);
21    }
22
23    public String name() {
24        return this.name;
25    }
26
27    public String server() {
```

```
28        return this.server;
29    }
30
31    public String country() {
32        return this.country;
33    }
34
35    private void assertValidEmail(String name, String server, String country) throws
   InvalidEmailException {
36        if (!validEmail(name, server, country))
37            throwNewInvalidEmailException();
38    }
39
40    private boolean validEmail(String name, String server, String country) {
41        if (name.matches("[a-z]+") && server.matches("[a-z]+")
42            && country.matches("[a-z]+")) {
43            return true;
44        }
45        return false;
46    }
47
48    public static EmailTyp emailConvertFromString(String plain) throws InvalidEmailException {
49        String[] s = plain.split("(@|\\.)");
50        String name = s[0];
51        String server = s[1];
52        String domain = s[2];
53        return EmailTyp.email(name, server, domain);
```

```
54    }
55
56    @Override
57    public int hashCode() {
58        int acc = 0;
59        for (byte b : this.toString().getBytes())
60            acc += b;
61        long longBits = Double.doubleToLongBits(acc);
62        return (int) (longBits ^ (longBits >>> 32));
63    }
64
65    @Override
66    public boolean equals(Object obj) {
67        if (this == obj)
68            return true;
69        if (!(obj instanceof EmailTyp))
70            return false;
71        EmailTyp temp = (EmailTyp) obj;
72        return temp.name() == this.name() && temp.server() == this.server()
73            && temp.country() == country();
74    }
75
76    @Override
77    public String toString() {
78        return this.name() + "@" + this.server() + "." + country();
79    }
80 }
```

```
81
```