

```
1  import java.util.Scanner;
2
3  public class Chars {
4
5      public static Scanner input = new Scanner(System.in);
6
7      // checks if the given letter is capitalized and returns a boolean
8      public static boolean isUpper(char ch)
9      {
10         return(ch >= 'A' && ch <= 'Z');
11     }
12
13     // checks if the given letter is not capitalized and returns a boolean
14     public static boolean isLower(char ch)
15     {
16         return (ch >= 'a' && ch <= 'z');
17     }
18
19     // checks if the given letter is a number and returns a boolean
20     public static boolean isNumber(char ch)
21     {
22         return (ch >= '0' && ch <= '9');
23     }
24
25     // takes a uncapitalized letter and returns it capitalized
26     public static char toUpper(char ch)
27     {
28         return (char)(ch - 32);
29     }
30
31     // takes a capitalized letter and returns it uncapitalized
32     public static char toLower(char ch)
33     {
34         return (char)(ch + 32);
35     }
36
37     // returns the char as its number in the table
38     public static int charToNum(char ch)
39     {
40         return ch-48;
41     }
42
43     // takes a char and returns the next one in table
44     public static char nextChar(char ch)
45     {
46         return (char)(ch + 1);
47     }
48
49     // takes a char and returns the prev one in table
```

```
50     public static char prevChar(char ch)
51     {
52         return (char)(ch - 1);
53     }
54
55     // takes a char and returns the next letter in table in a circle
56     public static char nextLetter(char ch)
57     {
58         if (ch == 'z')
59             return 'a';
60         else if (ch == 'Z')
61             return 'A';
62         return (char)(ch + 1);
63     }
64
65     // takes a char and returns the prev letter in table in a circle
66     public static char prevLetter(char ch)
67     {
68         if (ch == 'a')
69             return 'z';
70         else if (ch == 'A')
71             return 'Z';
72         return (char)(ch - 1);
73     }
74
75 }
76
```