

Solution to Homework 39

Problem. What can you say about the Kolmogorov complexity of the string 011011... in which the sequence 011 is repeated 2022 times?

Solution. This string s can be generated by the following program:

```
for(i = 1; i <= 2022; i++)  
    System.out.print("011");
```

that has length 49. So, the Kolmogorov complexity of this does not exceed 49: $K(s) \leq 49$.