

Solution to Homework 39

Problem. What can you say about the Kolmogorov complexity of the string 001001... in which the sequence 001 is repeated 2020 times?

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

```
for(i = 1; i <= 2020; i++)  
    System.out.print("001");
```

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