

CS340 Analysis of Algorithms Fall 2017

Homework:	2	Professor:	Dianna Xu
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Consult the algorithm write-up guidelines on the course website as necessary.

1. Problem 2.2
2. Problem 2.7 The instructions are a bit confusing - what it means is that you should determine how long (in terms of the number of words) a song script would be if you only wrote down each verse once and had some clear way of expressing the repeats. You can think about this as the encoding of the full song. The length of this “song script” is your $f(n)$.
Description of the encoding scheme and pseudo code. Focus on the length analysis. You may skip proof of correctness.
3. Problem 2.8 Full write-up. 2.8b is tricky and is extra credit. Just think about it and if you don't have all of it, try to sketch out what you understood to be the key points and which direction might be right.
4. Problem 3.2 Full write-up.

Please hand in your assignment in class.