Algorithm performance

How to measure?

By the end of this video you will be able to…

- Explain why the performance of an algorithm is important
- Describe some factors that impact the performance of an algorithm

$$\text{Flesch score} = 206.858 - 1.015\frac{\#\text{ words}}{\#\text{ sentences}} - 84.6\frac{\#\text{ syllables}}{\#\text{ words}}$$

There is hereby imposed on the taxable income of every individual (other than a surviving spouse as defined in section 2(a) or the head of a household as defined in section 2(b)) who is not a married individual (as defined in section 7703) a tax determined in accordance with the following table:

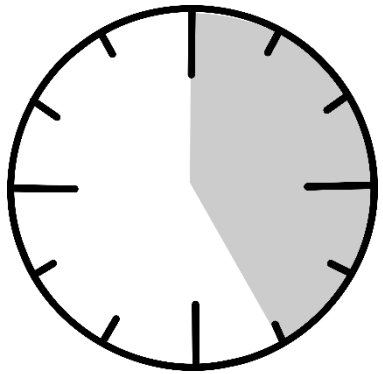
If you are single, never lost your spouse, and not the head of a household, you pay taxes according to the following table:

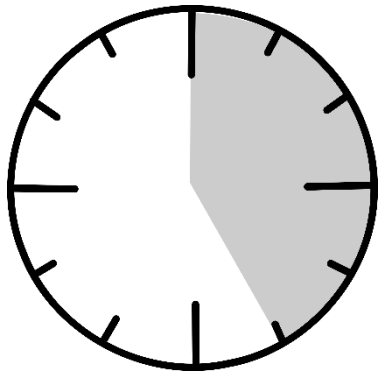
$$\text{Flesch score} = 206.858 - 1.015\frac{\#\text{ words}}{\#\text{ sentences}} - 84.6\frac{\#\text{ syllables}}{\#\text{ words}}$$

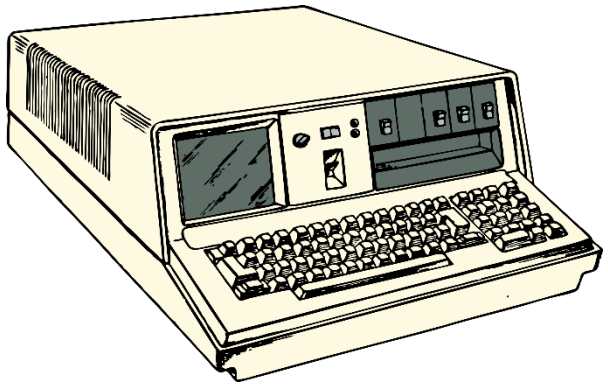
There is hereby imp… every individ… in section 2(a) or… section 2(b)) who is not a… ed in section 7703) a tax determi… ce with the following table:

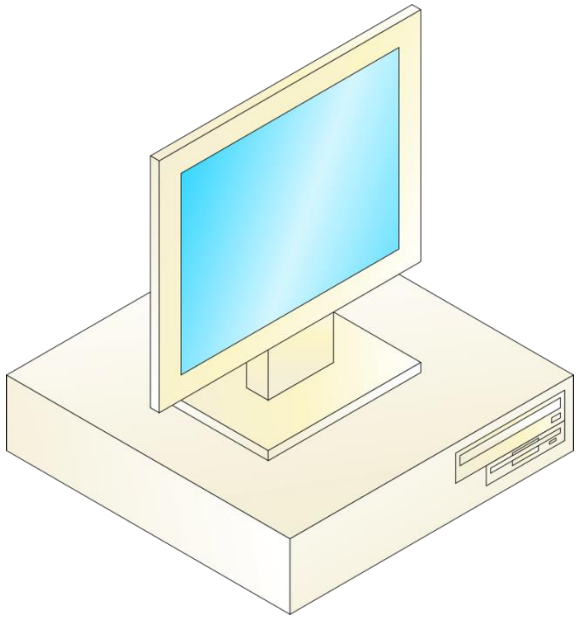
How long does this take?

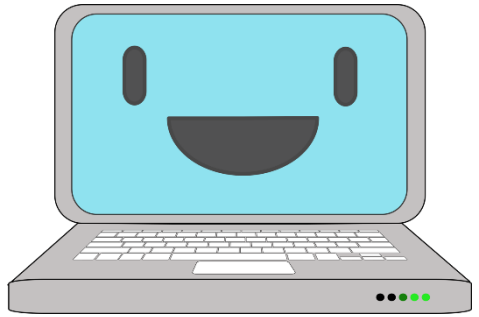
If you are single, never lost your spouse, and not the head of a household, you pay taxes according to the following table:

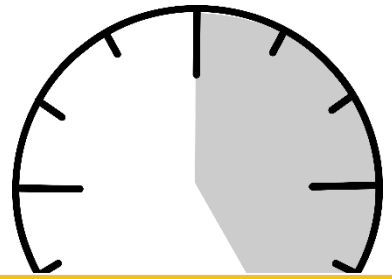




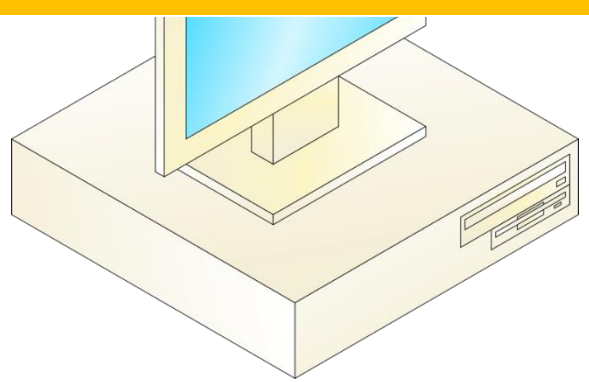




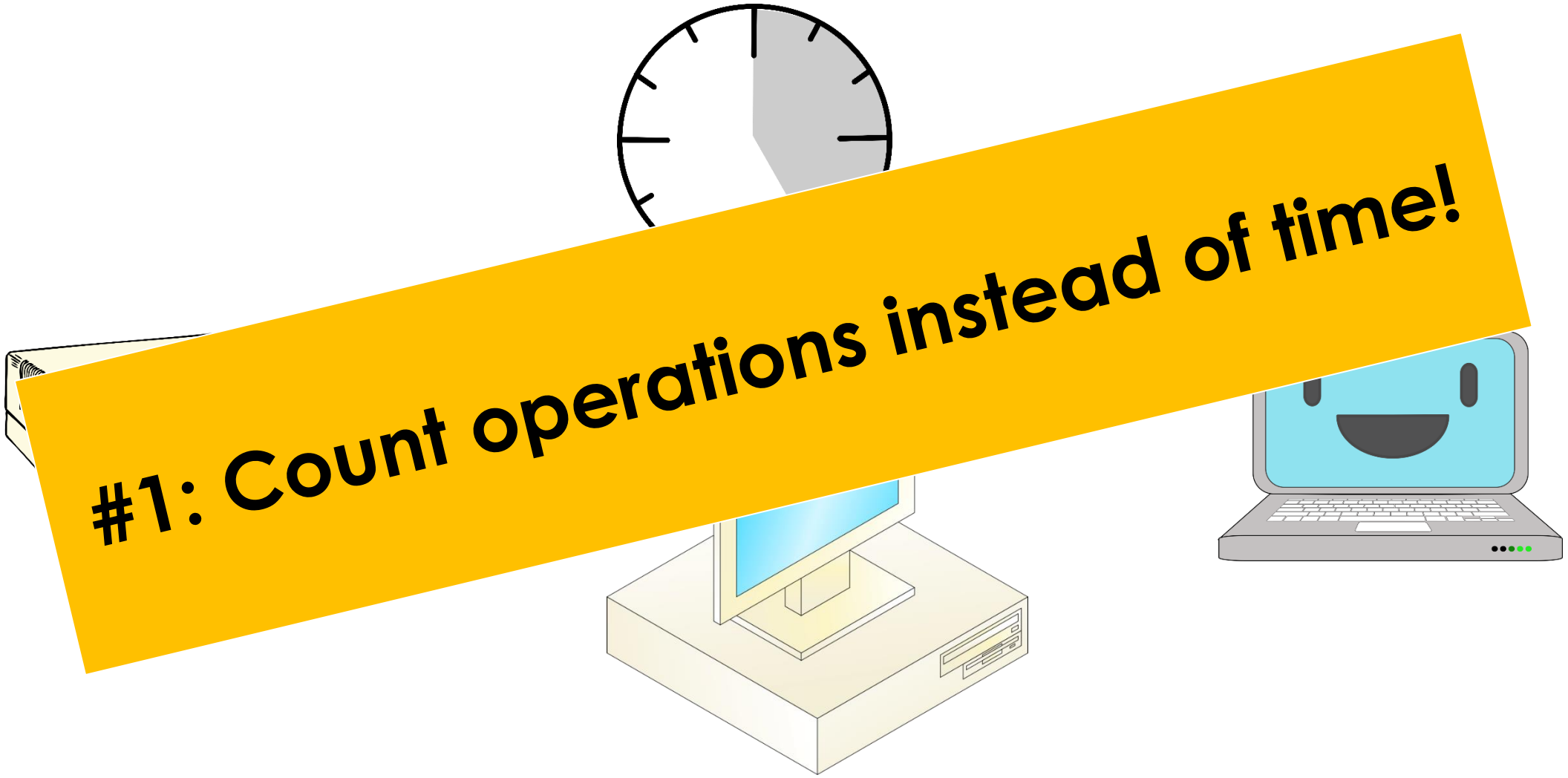




Should we give up trying to measure?



#1: Count operations instead of time!



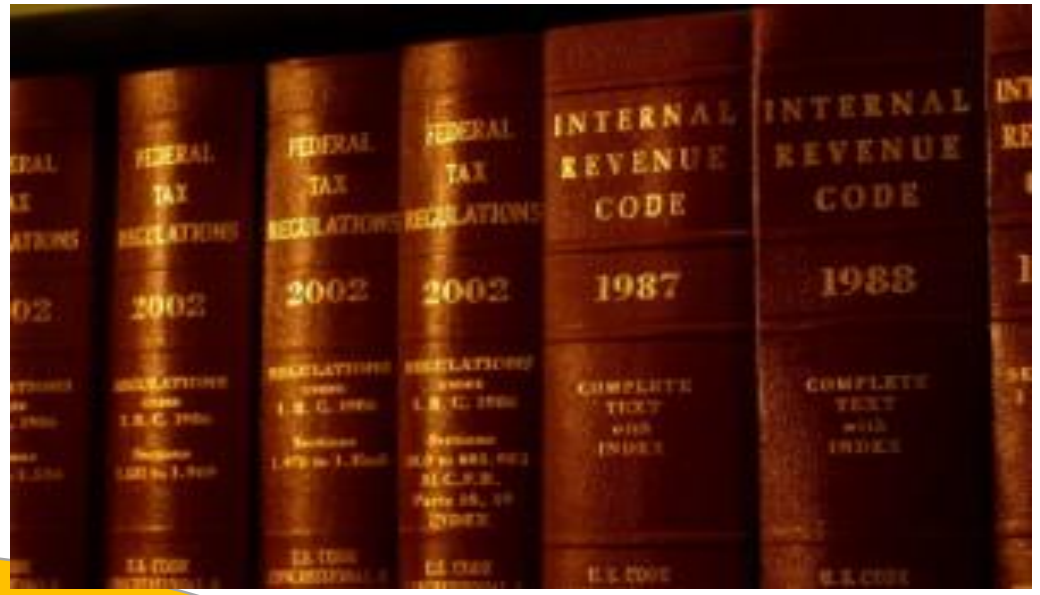
How many operations get executed?

Start at first index of array / list

While current index is less than length:

    count syllables

How many operations



Start at first index of array / list

While current index is less than length:

count syllables

How many operations get ex

Start at first ind

Whi **gth.**

#2: Focus on how performance scales

#2: Focus on how performance scales

If list is **twice** as long,
how much **more time** does it take to search it?

Is size all that matters?

#1: Count operations instead of time

#2: Focus on how performance scales

#3: Go beyond input size