CMPS 2200 Recitation 03

Name (Team Member 1):_____
Name (Team Member 2):_____

This recitation includes part of assignment 02.

Now that you have some practice solving recurrences, let's work on implementing some algorithms. In lecture, we discussed a divide and conquer algorithm for integer multiplication. This algorithm takes as input two n-bit strings $x = \langle x_L, x_R \rangle$ and $y = \langle y_L, y_R \rangle$ and computes the product xy by using the fact that $xy = 2^{n/2}x_Ly_L + 2^{n/2}(x_Ly_R + x_Ry_L) + x_Ry_R$. Use the `main.py` to implement one algorithm for integer multiplication: a divide and conquer algorithm that runs in quadratic time. Please refer to Eqs (15) and (16) https://nbviewer.org/github/allan-tulane/cmps2200-slides/blob/main/module-02-recurrences/recurrences.ipynb