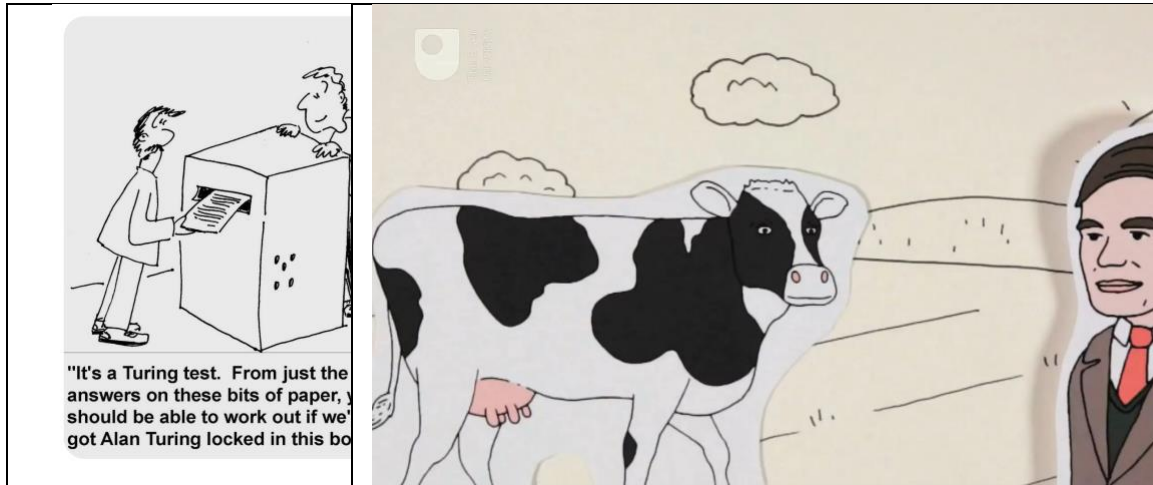


FYSE 1280 Fall 2025
Breaking The Code: The Enigma of Alan Turing

Assignment 13
For Wednesday, October 15



Reading

Read Chapter 11 “Artificial Intelligence” and Chapter 12 “Mathematical Biology” in *Simply Turing*

Writing

Set up a meeting with Maggie Wong, our writing tutor, to discuss your work on Essay 2.

Problems

1. Find the decimal representation of the rational number $11/13$.
2. Represent as the quotient of two integers the number whose repeating decimal expansion is $.202520252025\overline{2025}\dots$
3. Represent as the quotient of two integers the number whose decimal expansion is $.1232025202520252025\overline{2025}\dots$
4. What is the base 10 representation of the number whose binary representation is 111101010111000 ?
5. What is the binary representation of the year of your birth?