

# String/char question

- A *Caesar cipher* is a simple encryption where a message is encoded by shifting each letter by a given amount.
  - e.g. with a shift of 3, A → D, H → K, X → A, and Z → C
- Write a program that reads a message from the user and performs a Caesar cipher on its letters:

Run 1:

Your secret message: Computer science is awesome

Your secret key: 3

The encoded message: frpsxwhu vflhqfh lv dzhvrph

Run 2:

Your secret message: abc xyz

Your secret key: 3

The encoded message: def abc

Run 3:

Your secret message: AbC xYz

Your secret key: -3

The encoded message: xyz uvw

# Plan

- main()
  - Create scanner
  - Get message
  - Get key
  - Encode message
  - Display message
- encode()
  - Input: String msg, int key
  - Output: encoded string
  - Convert msg to lowercase
  - For every char in msg
    - Get next char
    - if (alphabetic) {
      - Shift char
      - If (shifted char > 'z')
        - Shifted char - 26
      - Else if (shifted char < 'a')
        - Shifted char + 26
      - Add to encoded string
    - Return encoded string