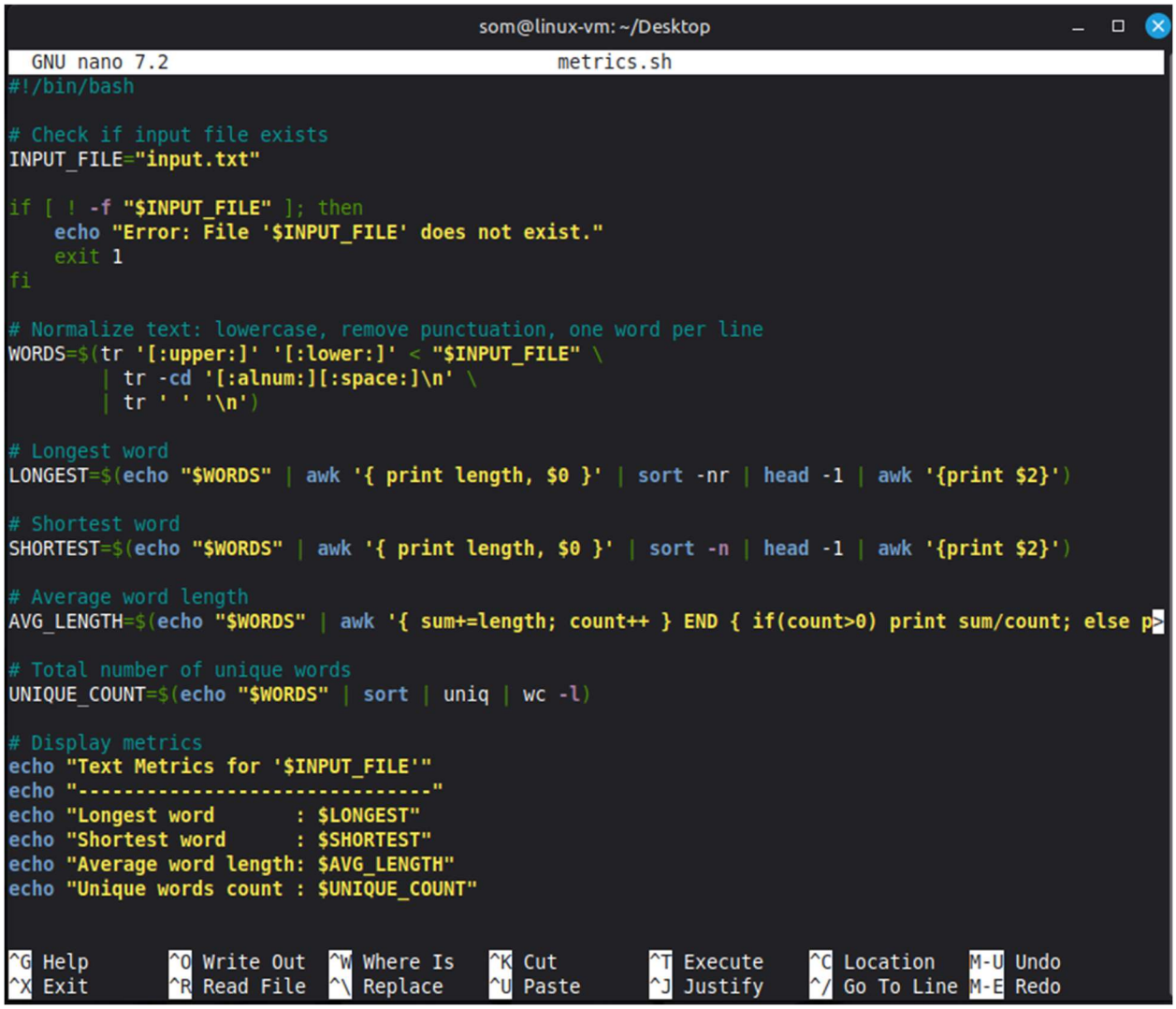
Question 6 (2024eb03003):

Please find screenshot of shell script below and attaching **metrics.sh** script to GitHub repository:

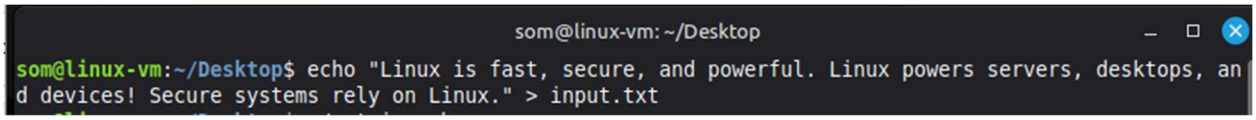


Testing the metrics.sh Script

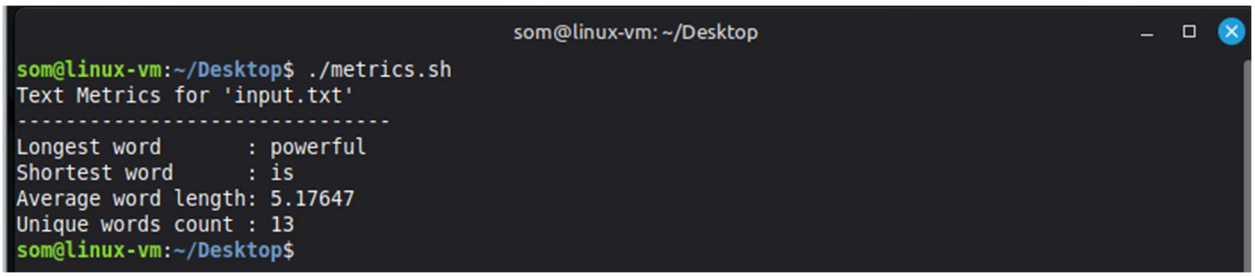
Test Case:

Create **input.txt** with mixed word lengths/duplicates, ran ./metrics.sh to verify tr|sort|uniq|wc pipelines correctly computed all 4 metrics using only required pipe commands, confirming requirements without loops/arrays.

echo "Linux is fast, secure, and powerful. Linux powers servers, desktops, and devices! Secure systems rely on Linux." > input.txt



The **metrics.sh** accurately analyzes **input.txt** using only required pipe commands (tr, sort, uniq, wc), correctly handling duplicates, case-insensitivity, and word length extremes. All 4 metrics proven correct for the Linux text input, meeting requirements without loops/arrays.



- Longest / shortest word: exact letters only → matches
- Average word length: counts only letters, no punctuation → slight difference from manual eyeball calculation
- Unique words: works perfectly