PSEUDOCODE

1. Start

2. Read input from file input.txt

3. If the file cannot be opened or read, print "Oops: Unable to read input file."

4. Read the shift direction from the file

5. If the shift direction is not 'l' or 'r', print "Oops: Invalid direction in the input file."

6. Read the shift number from the file

7. If the shift number is not provided or cannot be read, print "Oops: Could not read the shift number from the input file."

8. Read the plaintext from the file

9. Initialize an empty string variable ciphertext

10. For each character c in the plaintext:

11. If c is a lowercase alphabetic character:

12. Calculate the index of c in the alphabet using number_from_letter function

13. Determine the actual shift based on the shift direction

14. Calculate the index of the ciphertext character by adding the actual shift

15. Handle the cases where the index is beyond the alphabet's bounds by using modulo arithmetic

16. Convert the index of the ciphertext character to the actual character using letter_from_number function

17. Append the ciphertext character to the ciphertext string

18. Else:

19. Append c unchanged to the ciphertext string

11. Print the ciphertext string

12. End