

Start

↓
open file

↓
if file ! open ^{yes} → "Error opening file"
↓ no

read direction

↓
if ! char ^{yes} → "Ops: could not read the direction from the input file"
↓ no

else if direction = 1 → direction = -1

↓ no
else if direction = -1 → direction = 1

↓ no
else ^{yes} → "Ops: Invalid direction in the input file"

read shift

↓
if ! int ^{yes} → "Ops: could not read shift number from the input file"
↓ no

else → shift = shift

↓
while != eof ← encrLetter = Numtoletter(encrNum)

↓
read text

↓
realNum = letterToNum

↓
encrNum = realNum + (shift * direction)

if encrNum < 0 ^{no} → else
↓ yes
encrNum += 25
↑