**1 -** The script first checks if you’ve provided the correct input, needing both a search string and a file name. If you miss one, it shows the proper usage instructions

It uses getopts to handle the options

The -n flag shows line numbers

The -v flag shows lines that don’t match the string

By default, it performs a case-insensitive search

If you type --help, it shows instructions on how to use the script

After setting everything up, it runs grep with the right options to search the file

**2-** To support regex or additional options like -i, -c, and -l, I would edit the code to check for these new options in the getopts . For regex support, I could remove the -i option and let grep handle case sensitivity based on user input

**3-** The hardest part was using while and shift to handle the options. The while loop checks each option, and shift moves the arguments around after that. It’s tricky because you have to make sure the options are right and the search string and file name don’t get mixed up