

## Report Part2

Approach: -

Input:-

- Read input line by line, store in vector string.
- Convert hex to binary.

myAdd : -

- Get sign, exponent and mantissa.
- Then add 1 if exponent  $\neq 0$  to mantissa at 24<sup>th</sup> bit.
- Make exponent equal.
- Do the addition by taking cases, if ( $op1 > op2$ ) or ( $op2 < op1$ ) or ( $op1=op2$ ), where  $op1$  and  $op2$  are numbers to add.
- Check if the mantissa has more bits, then rightshift.
- Return the sum.

Now, convert to hex and print in output file.

For converting binToHex, hexToBin, functions are made.

For getting, sign, exponent, and mantissa functions are made, and we get them by bit manipulation using & operation and substring.

Output: - Output is written in output.txt file

Testing file: -