Tenth: Hexadecimal Bit-pattern in the IEEE-FP Format to Decimal Fraction (15 points)

Your task is to write a program that takes a hexadecimal bit-pattern and prints the decimal fractional value of the number.

Input-Output format: Your program will take one file name as its command-line input. Each line in the input file will have the total number of bits, the number of bits for the exponent, number of bits for the fraction, the hexadecimal bit-pattern, and the number of precision bits after the decimal point in the decimal fraction. These numbers on a given line are separated by a space. For each line in the input, you should print out the decimal fraction value with the specified number of precision bits followed by a new line.

Example Execution:

Let's assume we have the following input file:

input.txt
8 4 3 0x4d 2
8 4 3 0x16 7

Then the output should be:

- \$./tenth input.text
 6.50
- .0546875