$x = 3.625_{10}$

S	e	f
+ $\underset{\underline{}}{\textcircled{0}}$	10000000	110100...0

3.625_{10}

$\boxed{11.101_2}$ — fixed point

$1.\boxed{1101}_2 \times 2^{\textcircled{1}} \quad \textcircled{1} = e - 127$

f

$e = 128_{10}$

$e = 10000000_2$

$X = -12.75_{10}$

S	e	f
$\underline{1}$	10000010	1001100...0

$x = 1100.11_2$

$x = 1.\boxed{10011}_2 \times 2^{\textcircled{3}} \quad \textcircled{3} = e - 127$

f

$e = 130_{10}$

$e = 10000010_2$

$X = .1875_{10}$

S	e	f
$\underline{0}$	01111100	100...0

$x = 0.0011_2$

$x = 1.\underset{f}{\underset{=}{0}}_2 \times 2^{\textcircled{-3}} = e - 127$

$e = 124_{10}$

$e = 01111100_2$

High-Level = Main.c

‖ _Compiler_
↓

Assembly = main.s

‖ _Assembler_
↓

Machine (ELF) = main.o → Contains symtab
binary which holds function
names & global variables

Static Libraries
(.a)

‖ Linker
↓

Executable = a.out

Dynamic
Libraries
(.so)

‖ Runtime
↓ Execution

Output ← _Loader_