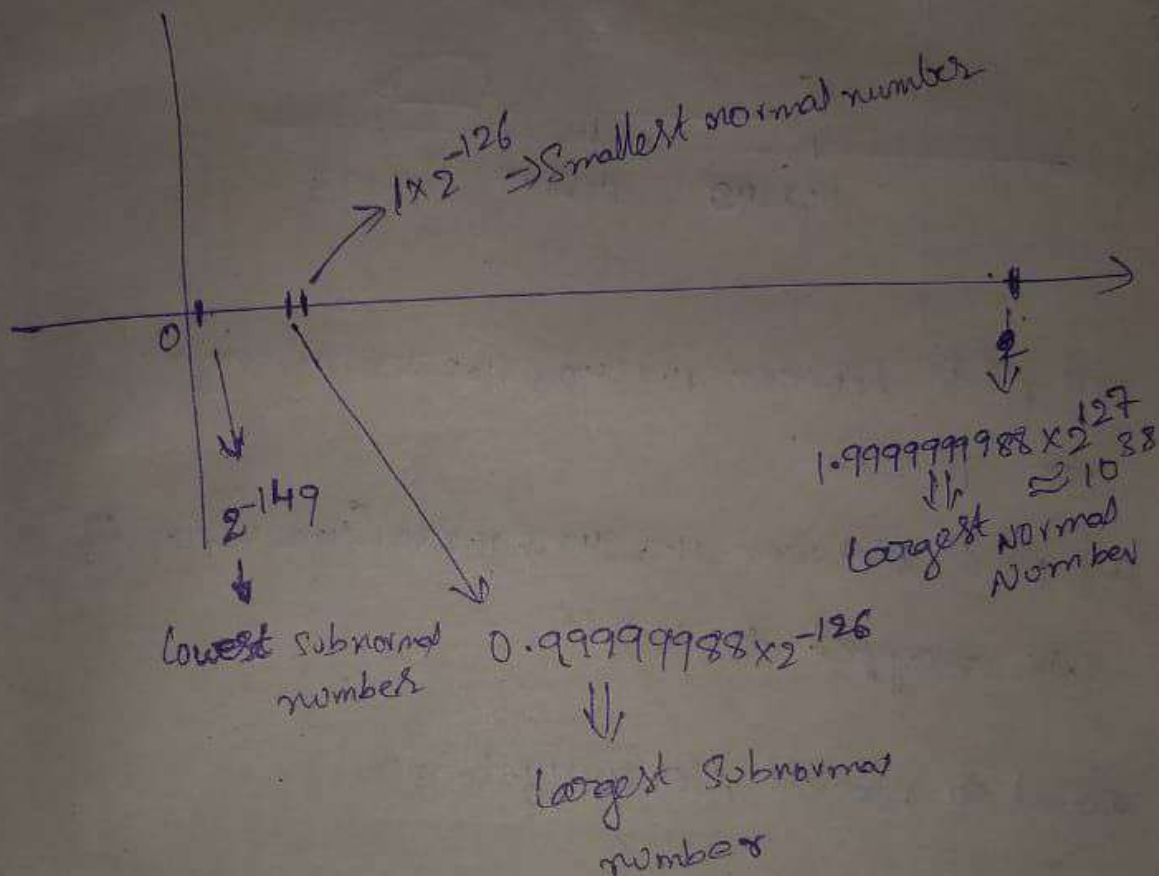


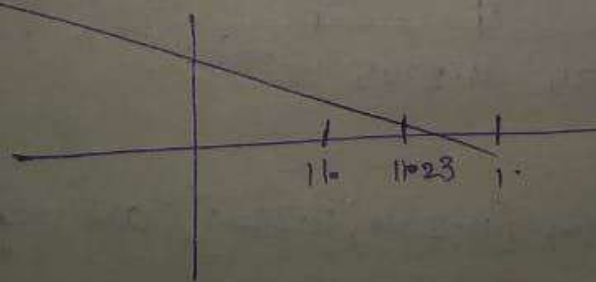
Q-2

Normal & Sub normal Number line Representation

IEEE 754 32-bit single precision

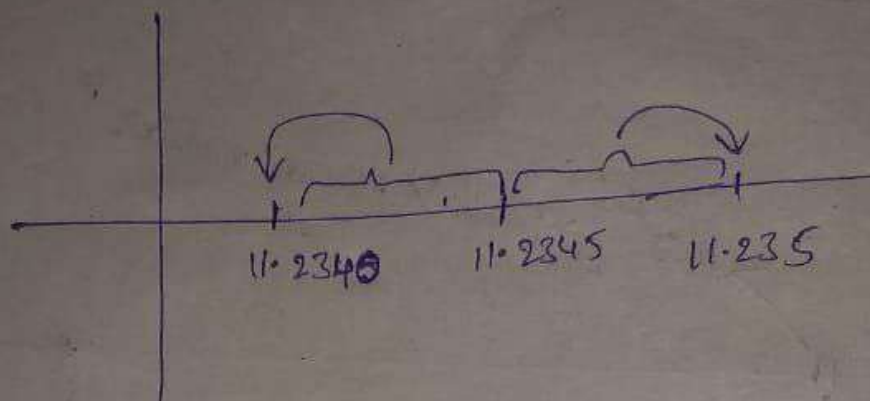


Q-3



Q-3

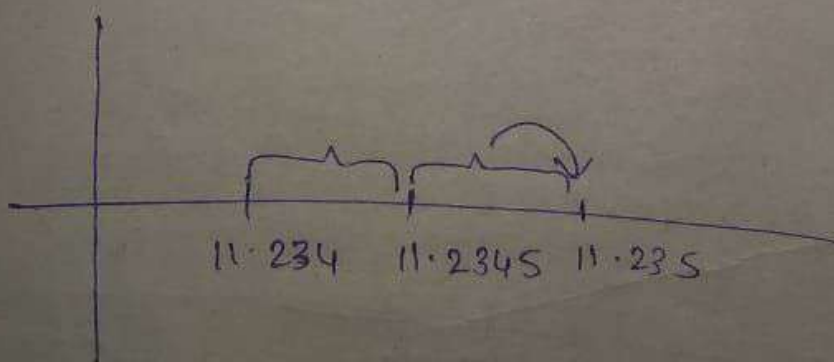
Round to nearest, ties to even



all points between 11.2340 & 11.2345 are mapped  
to 11.234

all points between 11.2345 & 11.235 ( $[11.2345, 11.235]$ )  
are mapped to 11.235

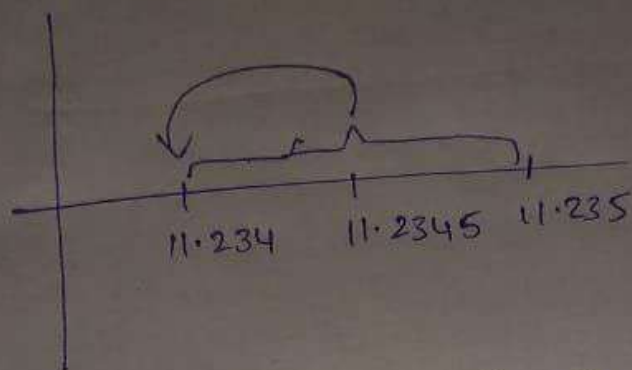
Round to nearest, ties away from 0



all points between  $[11.234, 11.2345)$  are mapped  
to 11.234

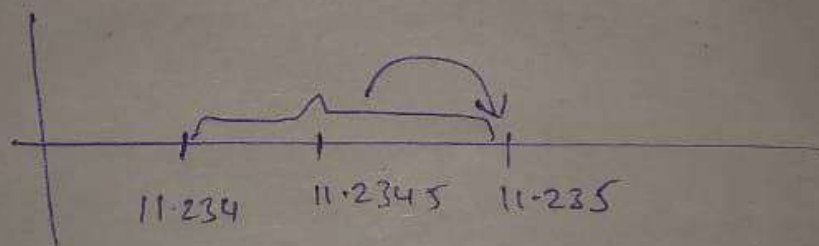
all points between  $[11.2345, 11.235]$  are mapped  
to 11.235

Round towards 0 (truncation)



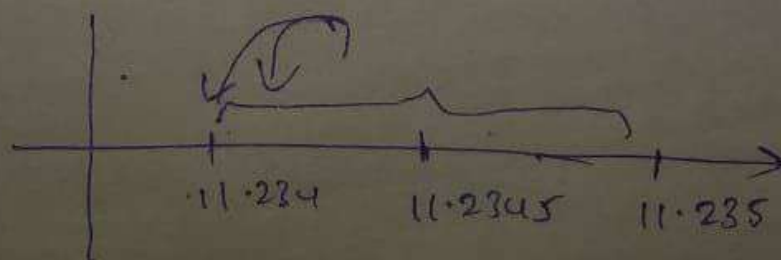
all points between  $[11.234, 11.235)$  are mapped to 11.234

Round towards  $+\infty$  (ceiling)



all points between  $[11.234, 11.235]$  are mapped to 11.235

Round towards  $-\infty$  (floor)



all points between  $[11.234, 11.235)$  are mapped to 11.234