786

Name: Muhammad Sherjeel Akhtar

Roll No: 20p-0101

Subject: Numerical Computing

Assignment No: 03

Submitted **T**o **R**espect **S**ir: **Muhammad Nauman**

Section: 5A

786

Name : Muhammad Shefeel Akhtar

Roll no: 20p-0601

Section : BCS-5A

⇒ Assignment No : 03

⇒ Submitted To Respected Sir :

⇒ Muhammad Nauman ⇐

Question :

↳ Convert the real number 100.875 to IEEE.754 standardized format.

Solotion :-

2	100
2	50
2	25
2	12
2	6
2	3
2	1
	0

0.875×2	1.750	1
0.750×2	1.500	1
0.500×2	1.00	1
0×2	0	0

.

⇒ Exponential bias : 127

Normalize:

1.001001110

Scientific Notation:

1.001001110×2^6

(Mantessa)

So, we can write

$127 + 6 = 133$

⇓

Exponent

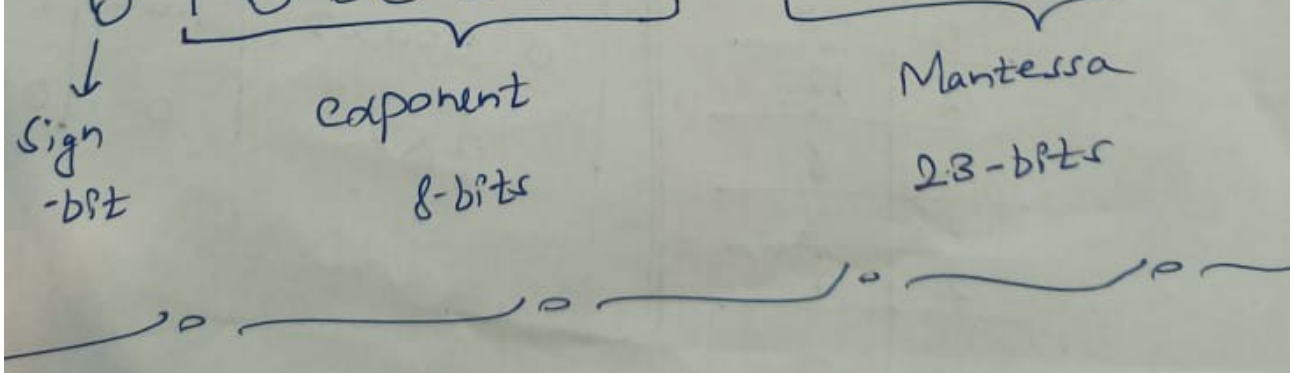
Also we can write

10000101

②

2	133
2	66
2	33
2	16
2	8
2	4
2	2
2	1
	0

1 0 1 1 0 0 0 1



END.