

Saim Ahmed

CIS-17C Midterm

Question 4

BigO() Scaling Table

BigO()	SECOND	MINUTE	HOURL	DAY	MONTH	YEAR	DECADE	CENTURY
$N^{1/3}$	2097152	4.52985E+11	9.78447E+16	1.35261E+21	3.65203E+25	6.31072E+28	6.31072E+31	6.31072E+34
$N^{1/2}$	16384	58982400	2.12337E+11	1.22306E+14	1.10075E+17	1.58508E+19	1.58508E+21	1.58508E+23
N	128	7680	460800	11059200	331776000	3981312000	39813120000	3.98131E+11
NLog(N)	26.9	811	30850	576999	1.30E+07	1.31E+08	1.31E+09	1.11E+10
$N^2$	11.31371	87.6356092	678.8225099	3325.537551	18214.71932	63097.63862	199532.253	630976.3862
$N^2\text{Log}(N)$	14.5	18.77	23.69	28.07	33.35	37.65	41.96	46.62
$2^N$	7	12.9068906	18.81378119	23.39874369	28.30563429	31.89059679	35.21252488	38.53445298
N!	5	7	9	10	11	12	13	14