

ADA Practical

NAME :: ANAND DASANI

ENROLLMENT NO :: 190180107012

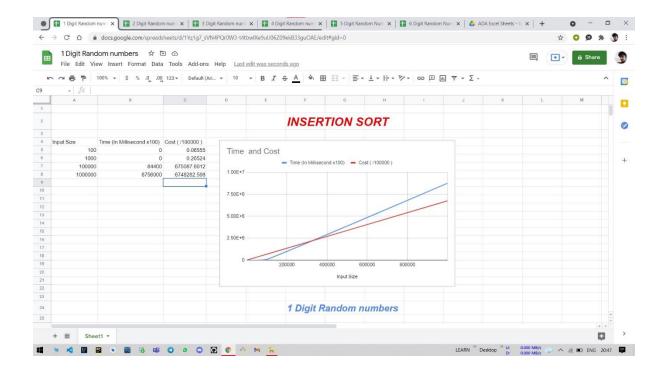
DATE :: 21/06/2021

1. Graph for 1 Digit Random numbers

INSERTION SORT

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	0	6555
1000	0	26524
100000	844	6750876012
1000000	87560	674828259774

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	0	1867
1000	3	31791
100000	42	4874861
1000000	300	64163911

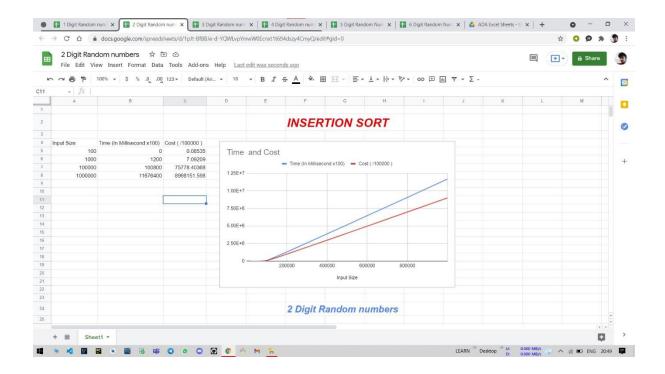


2. Graph for 2 Digit Random numbers

INSERTION SORT

<u>Input Size</u>	<u>Time (In ms)</u>	<u>Cost</u>
100	0	8535
1000	12	709209
100000	1008	7577840368
1000000	116764	8998115159847

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	0	1867
1000	3	30246
100000	38	4928447
1000000	267	58520605

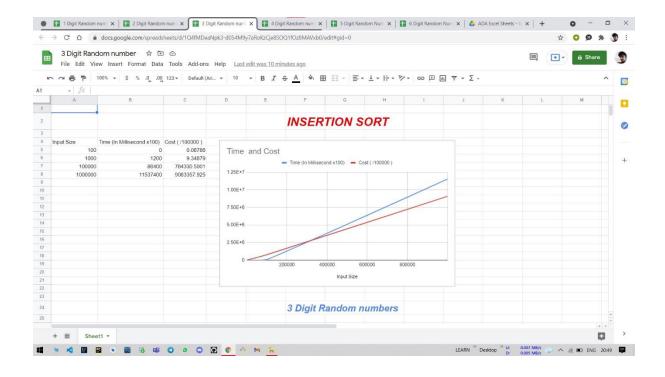


3. **Graph for 3 Digit Random numbers**

INSERTION SORT

<u>Input Size</u>	<u>Time (In ms)</u>	<u>Cost</u>
100	0	6768
1000	12	709209
100000	864	7643305001
1000000	115374	908335792536

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	0	1892
1000	3	32046
100000	38	4932191
1000000	267	64967911

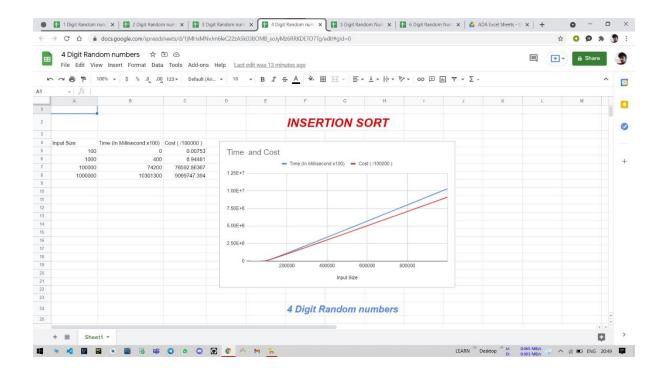


4. **Graph for 4 Digit Random numbers**

INSERTION SORT

<u>Input Size</u>	<u>Time (In ms)</u>	<u>Cost</u>
100	0	7530
1000	4	894481
100000	742	7659286367
1000000	115374	909974739402

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	0	1885
1000	2	32039
100000	47	4932430
1000000	340	64970803

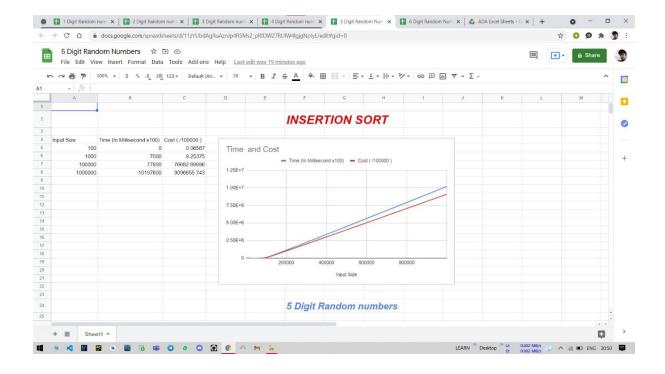


5. **Graph for 5 Digit Random numbers**

INSERTION SORT

<u>Input Size</u>	<u>Time (In ms)</u>	<u>Cost</u>
100	0	6567
1000	7	925395
100000	778	7668269996
1000000	101976	909665574220

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	0	1896
1000	2	32024
100000	37	4932161
1000000	252	58576091

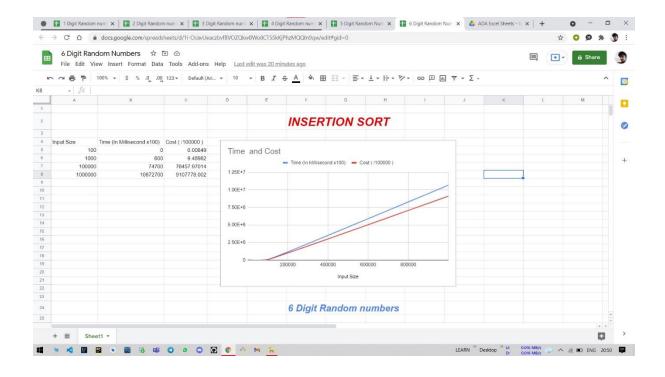


6. **Graph for 6 Digit Random numbers**

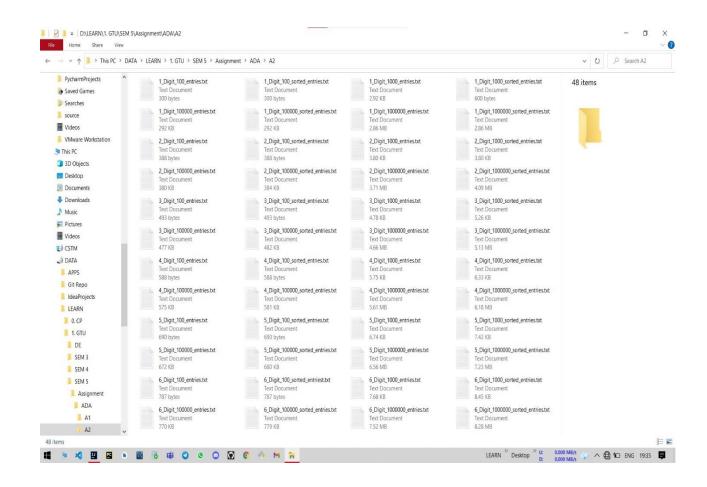
INSERTION SORT

<u>Input Size</u>	<u>Time (In ms)</u>	<u>Cost</u>
100	0	8490
1000	6	948982
100000	747	7645797014
1000000	106727	910777800216

Input Size	<u>Time</u>	<u>Cost</u>
	<u>(In ms)</u>	
100	1	1895
1000	3	32006
100000	64	4874209
1000000	252	64900033



7. Screen Shot of Files sorted files created



8. Screen Shot of Excel Sheets

