

Assignment-2

Vinta Reethu - ES18BTECH11028

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1 C code output :

N	a	r	Ascending	Descending	Random
5	1	3	1, 3, 9, 27, 81 - 4	81, 27, 9, 3, 1 - 10	27, 81, 1, 9, 3 - 8
8	2	5	2, 10, 50, 250, 1250, 6250, 31250, 156250 - 7	156250, 31250, 6250, 1250, 250, 50, 10, 2 - 28	31250, 1250, 10, 6250, 156250, 50, 250, 2 - 20
10	8	3	8, 24, 72, 216, 648, 1944, 5832, 17496, 52488, 157464 - 9	157464, 52488, 17496, 5832, 1944, 648, 216, 72, 24, 8 - 45	24, 17496, 5832, 52488, 157464, 648, 72, 1944, 8, 216 - 31

2 MIPS code output :

N	a	r	Ascending	Descending	Random
5	1	3	1, 3, 9, 27, 81 - 4	81, 27, 9, 3, 1 - 10	3, 1, 9, 27, 81 - 4
8	2	5	2, 10, 50, 250, 1250, 6250, 31250, 156250 - 7	156250, 31250, 6250, 1250, 250, 50, 10, 2 - 28	250, 156250, 50, 1250, 2, 31250, 10, 6250 - 20
10	8	3	8, 24, 72, 216, 648, 1944, 5832, 17496, 52488, 157464 - 9	157464, 52488, 17496, 5832, 1944, 648, 216, 72, 24, 8 - 45	17496, 8, 24, 648, 5832, 72, 52488, 1944, 157464, 216 - 24

- 1st column is the size of array
- 2nd column is first element of GP
- 3rd column is common ratio of GP
- 4th column is Number of comparisons in array of increasing order
- 5th column is Number of comparisons in array of decreasing order
- 6th column is Number of comparisons in array of random order