

10 inputs

Function	Calls	Time (ms)
mathcore.add	20	0
mathcore.sub	2	0
mathcore.div	2	0
mathcore.mul	1	0
mathcore.exp	11	0
mathcore.sqrt	1	0

100 inputs

Function	Calls	Time (ms)
mathcore.add	200	0
mathcore.sub	2	0
mathcore.div	2	0
mathcore.mul	1	0
mathcore.exp	101	0
mathcore.sqrt	1	0

1000 inputs

Function	Calls	Time (ms)
mathcore.add	2000	0
mathcore.sub	2	0
mathcore.div	2	0
mathcore.mul	1	0
mathcore.exp	1001	0
mathcore.sqrt	1	0

Note

Program took most time calling **add** and **exp** functions. Function **add** is called $2 * \text{number of inputs}$ times and function **exp** is called $2 * \text{number of inputs} + 1$ times.

Conclusion

We should focus on **add** and **exp** functions for better optimization.