

Data structure assignment

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1 Introduction

Data structure is a storage that is used to store and organize data. It is a way of arranging data on a computer so that it can be accessed and updated efficiently. Depending on your requirement and project, it is important to choose the right data structure for your project.

2 Use images

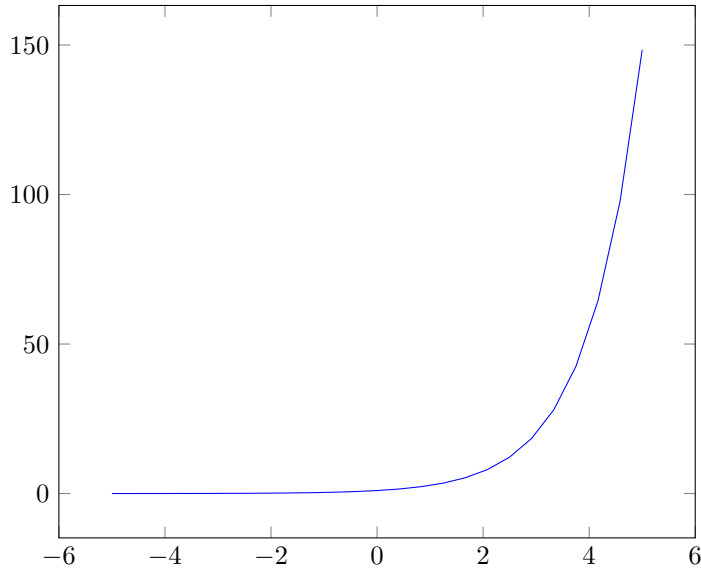


3 Use math equation

The well known Pythagorean theorem $x^2 + y^2 = z^2$ was proved to be invalid for other exponents. Meaning the next equation has no integer solutions:

$$x^n + y^n = z^n$$

4 Use graph



5 Use table

Algorithm	Best Case	Expected
SELECTION SHORT	O(N2)	O(N2)
MERGE SHORT	O(N2)	O(N2)
LINEAR SEARCH	O(N2)	O(N2)

Here is the reference [1]

References

- [1] M. Shkir, K. V. Chandekar, A. Khan, T. Alshahrani, A. M. El-Toni, M. Sayed, A. Singh, A. A. Ansari, M. Muthumareeswaran, A. Aldalbahi, *et al.*, “Tailoring the structure-morphology-vibrational-optical-dielectric and electrical characteristics of ce@ nio nps produced by facile combustion route for optoelectronics,” *Materials Science in Semiconductor Processing*, vol. 126, p. 105647, 2021.