

# Data Structure Overview

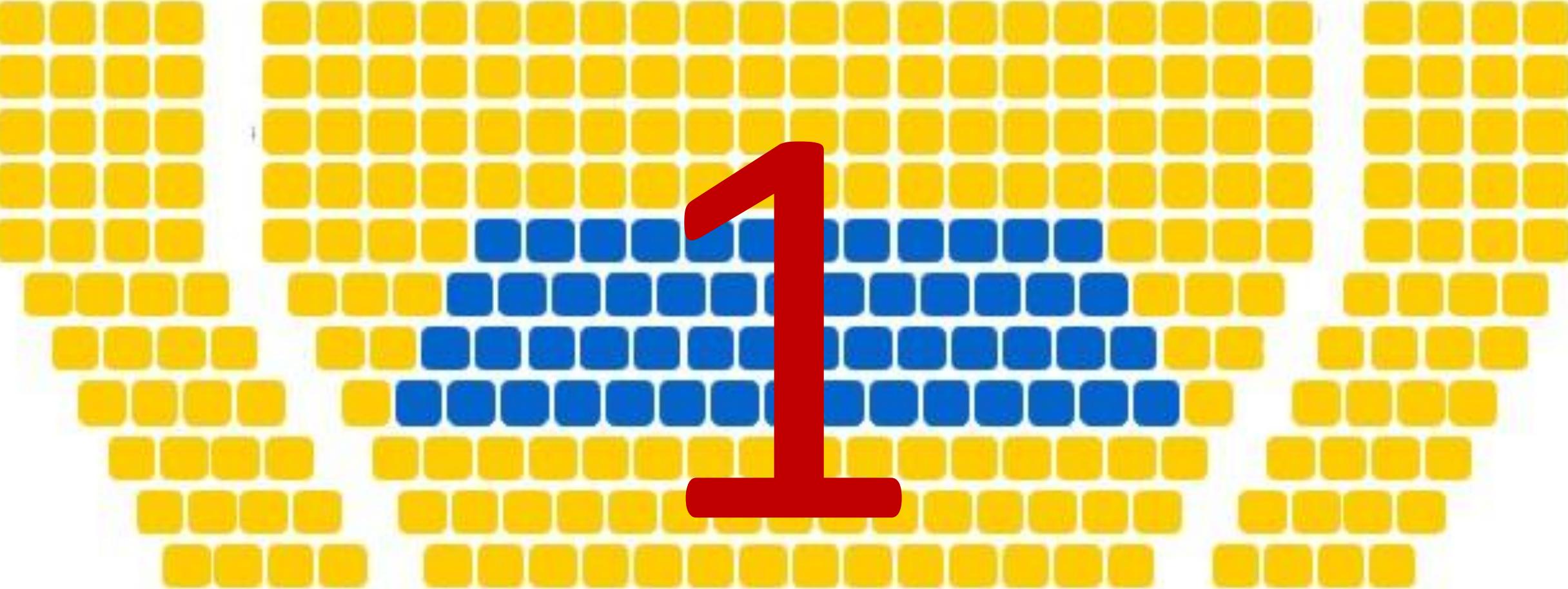
# What is data structure?

- “An organization of information, usually in memory, for better algorithm efficiency” - NIST, 2004
- “Way in which data are stored for efficient search and retrieval” – Encyclopedia Britannica, 2014
- “A particular way of organizing data in a computer so that it can be used effectively” - Geeks for Geeks, n.d.

# What is algorithm?

- Clearly specified set of simple instructions to be followed to solve a problem (Weiss, 2013).
- The steps to be carried out in order to accomplish a particular task (Bhasin, 2015).

A good data structure with improper algorithm will not improve efficiency



1

Screen



Screen

1 2 3 4

5 6 7 8

3

279 280 281 282 283

284 285 286 287

Screen

1 2 3 4

A

1 2 3 4

B

1 2 3 4

C

1 2 3 4

D

1 2 3 4

E

1 2 3 4

F

4

Screen

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1	2	3	4

F

Screen