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Data Structures & Algorithms by CodeWithHarry

This course will get you prepared for placements and will teach you how to create efficient and fast algorithms.

Data structures and algorithms are two different things.

Data Structures: Arrangement of data so that they can be used efficiently in memory (data items)

Algorithms: Sequence of steps on data using efficient data structures to solve a given problem.

Other Terminology

Database :- Collection of information in permanent storage for faster retrieval and updation.

Data warehousing :- Management of huge amount of legacy data for better analysis.

Big data :- Analysis of too large or complex data which cannot be dealt with traditional data processing application.

Data Structures and Algorithms are nothing new. If you have done programming in any language like C you must have used Arrays → A data structure and some sequence of processing steps to solve a problem → Algorithm

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Memory layout of C programs

When the program starts, its Code is copied to the main memory.

Stack holds the memory occupied by the functions.

Heap contains the data which is requested by the program as dynamic memory.

Initialized and uninitialized data segments hold initialized and uninitialized global variables respectively