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Intro to Computing

Chapter 4 Review Questions

1. What is big O notation? What's it for?

Big O notation, the O stands for Ordnung, which means the order of approximation. In computer science big O notation is used to determine runtime and efficiency of the runtime.

1. Give examples of big O notation, and list them in 'increasing' order.

O(1), O(log n), O(n), O(n log n), O(n^2), O(n Exponential), O(n factorial).

1. For the 6 sorting: Bubble sort, Bucket sort, Insertion sort, Heap sort, Merge sort, Quck sort, find the 'best' youtube/ Google links explaining how each work.
2. What is stack? What's the acronym associated with it?

The stack is a special area of memory that functions are call from. LIFO (Last in first out).

1. What is queue? What's the acronym associated with it?

Queues are collections based on FIFO. FIFO (First in first out).

1. What is symbol table? What's its equivalent in Python?

A symbol table is a data type that used to associate key value pairs. It is a map in python.

1. What's heap?

It is special area of memory where an object is created.