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CS303

Big(O)

The function: Morse\_Node()

The big O is O(1) because it will always execute in the same time regardless of the size of the input data set.

The function: Morse\_Node Morse\_Node(string s, char c)

The big O is O(1) because it will always execute in the same time regardless of the size of the input data set.

The function: BSTREE BSTREE()

The big O is O(1) because it will always execute in the same time regardless of the size of the input data set.

The function: void insert(Morse\_Node& mn, int i)

The big O is O(N) because performance will grow linearly and in direct proportion to the size of the input data set.

The function: char decode(string s)

The big O is O(N) because performance will grow linearly and in direct proportion to the size of the input data set.

The function: void encode\_rec(char target, Morse\_Node\* p,string& s)

The big O is O(N) because performance will grow linearly and in direct proportion to the size of the input data set.

The function: string encode(char c)

The big O is O(1) because it will always execute in the same time regardless of the size of the input data set.