My Project

Generated by Doxygen 1.9.5

Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

Chapter 3

Class Documentation

3.1 BinarySearchTree Class Reference

Public Types

- enum **order** { **PRE** , **IN** , **POST** }

Public Member Functions

- void **insert** (ll val)
- void **traverse** (BSTNode *T, order tt)
- ll **height** (BSTNode *T)

Public Attributes

- BSTNode * **root**

The documentation for this class was generated from the following file:

- DSA.cpp

3.2 BSTNode Class Reference

Public Member Functions

- **BSTNode** (ll val)

Public Attributes

- ll **info**
- ll **level**
- BSTNode * **left**
- BSTNode * **right**

The documentation for this class was generated from the following file:

- DSA.cpp

3.3 DoublyLinkedList Class Reference

Public Member Functions

- void **insert** (ll data)
- void **printer** (string sep=", ")
- void **reverse** ()

Public Attributes

- DoublyLinkedListNode * **head**
- DoublyLinkedListNode * **tail**

The documentation for this class was generated from the following file:

- DSA.cpp

3.4 DoublyLinkedListNode Class Reference

Public Member Functions

- **DoublyLinkedListNode** (ll val)

Public Attributes

- ll **data**
- DoublyLinkedListNode * **next**
- DoublyLinkedListNode * **prev**

The documentation for this class was generated from the following file:

- DSA.cpp

3.5 SinglyLinkedList Class Reference

this class is an implementation of data structure SinglyLinkedList

Public Member Functions

- void insert (ll data)

  Brief description. Brief description continued.
- SinglyLinkedListNode * **find** (ll data)
- bool **deleteVal** (ll data)
- void **printer** (string sep=", ")
- void **reverse** ()

Public Attributes

- SinglyLinkedListNode * **head**
- SinglyLinkedListNode * **tail**

3.5.1 Detailed Description

this class is an implementation of data structure SinglyLinkedList

this class creates nodes by SinglyLinkedListNode and links them to form singlely linked list

See also

insert()

3.5.2 Member Function Documentation

3.5.2.1 insert()

```
void SinglyLinkedList::insert (
            ll data )  [inline]
```

Brief description. Brief description continued.

Detailed description starts here.

The documentation for this class was generated from the following file:

- DSA.cpp

3.6 SinglyLinkedListNode Class Reference

this class is an implementation of SinglyLinkedListNode

Public Member Functions

- **SinglyLinkedListNode** (ll val)

Public Attributes

- ll **data**
- SinglyLinkedListNode * **next**

3.6.1 Detailed Description

this class is an implementation of SinglyLinkedListNode

this class creates nodes which are singlely linked to form a singlely linked list

See also

SinglyLinkedListNode

The documentation for this class was generated from the following file:

- DSA.cpp

3.7 Trie Class Reference

Public Member Functions

- bool **find** (Trie *T, char c)
- void **insert** (string s)
- bool **checkPrefix** (string s)
- ll **countPrefix** (string s)

Public Attributes

- ll **count**
- map< char, Trie * > **nodes**

The documentation for this class was generated from the following file:

- DSA.cpp

Chapter 4

File Documentation

4.1 DSA.cpp File Reference

this file talks about some data structures implementations.

```
#include <bits/stdc++.h>
```

Classes

- class SinglyLinkedListNode

  this class is an implementation of SinglyLinkedListNode
- class SinglyLinkedList

  this class is an implementation of data structure SinglyLinkedList
- class DoublyLinkedListNode
- class DoublyLinkedList
- class BSTNode
- class BinarySearchTree
- class Trie

Macros

- #define **ll** long long int
- #define **vi** vector<int>
- #define **vll** vector<ll>

Functions

- ostream & **operator**<< (ostream &out, const SinglyLinkedListNode &node)
- SinglyLinkedList **merge** (SinglyLinkedList list1, SinglyLinkedList list2)
- ostream & **operator**<< (ostream &out, const DoublyLinkedListNode &node)
- ostream & **operator**<< (ostream &out, const BSTNode &node)

4.1.1 Detailed Description

this file talks about some data structures implementations.

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Date

: 21/09/22

this file containes implementation of 7 following mentioned data structures:

1. BinarySearchTree
2. BSTNode
3. DoublyLinkedList
4. DoublyLinkedListNode
5. SinglyLinkedList
6. SinglyLinkedListNode
7. Trie

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