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CS 300

Pseudocode

struct Course{

String name

String number

Vector<string> preReqs

}

Struct Node{

Course course

Node left

Node right

}

BinarySearchTree() {

Initialize with root node

}

Insert (Course) {

If root is null {

Add course to root

}

Else {

Add node

}

}

NewNode (node, course){

If (node is greater than current node) {

If (current node->left is null){

Add course

}

Else{

Call NewNode(current node->left, course)

}

} else {

If (current node->right is null){

Add course

}

Else{

Call NewNode(current node->right, course)

}

}

}

Print CourseInfo (node, course number){

If (number > node) {

Go left

CourseInfo(node left, number

}

If (number < node){

Go right

CourseInfo(node right, number)

}

If no number == node {

Print course was not found

}

Else {

Print course name, number, and prereqs

}

}

Vector<Course> loadCourses (string csvPath) {

Print “Loading CSV file”

Define a vector course to hold courses

Initialize csv parser

While file has lines available {

//For loop to read rows of file

For (i = 0; i < file.rowCount(); i++){

If row length == 2 {

Add name to course name

Add number to course number

Push back line

}

Else if row length > 2{

Add name to course name

Add number to course number

Add prerequisits to vector

Push back line

}

Else {

Print error message, line does not contain all required info

}

Insert line to binary search tree

}

}