**Project One Milestone Three**

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**CS 300**

Open file "course\_data.txt" for reading

IF file NOT open THEN:

OUTPUT "File cannot be opened"

EXIT

END IF

FOR line IN file:

courseData = Split(line, “,”)

IF courseData.Size() is LESS THAN 2 THEN:

OUTPUT "Invalid line format"

CONTINUE

END IF

number = courseData[0]

title = courseData[1]

prereq = courseData[2:]

FOR p IN prereq:

IF p NOT IN courseNumbers THEN:

OUTPUT “Prerequisite course not found"

CONTINUE

END IF

END FOR

END FOR

FUNCTION Course():

Number = 0

Title = “”

Prereq = {}

END Course()

FUNCTION Insert(root, course)

IF root is EQUAL TO nullptr THEN

Root = course

RETURN course

END IF

IF course.number is LESS THAN root.course.number THEN:

root.left = Insert(root.left, course)

Else:

root.right = Insert(root.right, course)

END IF

RETURN root

END Insert(root, course)

root = nullptr

FOR line IN file

C = new Course()

root = Insert(root, C)

END FOR

FUNCTION Print(node)

IF node is NOT EQUAL TO nullptr THEN:

Print(node.left)

OUTPUT "Number: " + node.course.number

OUTPUT "Course Title: " + node.course.title

OUTPUT "Prerequisites: " + join(node.course.prereq, ", ")

Print(node.right)

END IF

END Print(node)