

Those of you who turned in yesterday's assignment in Windows Teams did a great job. If you submit .txt or .java, I can easily go through and read everyone code without downloading anything. So good! I know I told you a couple weeks ago to submit an entire .zip file into teams, but that didn't work out so good for me, so let's keep going this way.

I have posted Project 35c in file PCScix35c.pdf. This has all the graph theory definitions you need, some of the methods already assigned, and some new methods.

Your assignment now is to:

- Download and read PCScix35c.pdf.
- Submit P35c Program 2 (associates) to Microsoft Teams Assignment 0413 if you have not already done so.
- Write and submit P35c Programs 3 and 4 (isConnected and numberOfComponents) to Microsoft Teams Assignment 0414 (due tomorrow but try to finish it today).
- Project 35c Program 5 (isTree) will be assigned on tomorrow, Assignment 0415, and due on Friday, April 16.

After you have worked on this, checkin at

0414 AP Computer Science Checkin

Here is pseudocode for isConnected and numberOfComponents.

```
isConnected
    Get first vertex v
    Get all associates A of v
    If the length of A equals the number of vertices in the graph,
        Return true
    Else
        Return false

numberOfComponents
    Clone a list L of vertices
    While L is nonempty
        Get the first vertex v in L
        Get all the associates A of v
        Remove everything in A from L
        Increment a counter
    Return the counter
```

Please feel free to send me a message any time on Microsoft Teams.