

# ICA340 – Graph Text File

Data Structures and Algorithms

CS 244

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*Based on the book: Data Structures and Algorithms in C++ (Goodrich, Tamassia, Mount)*

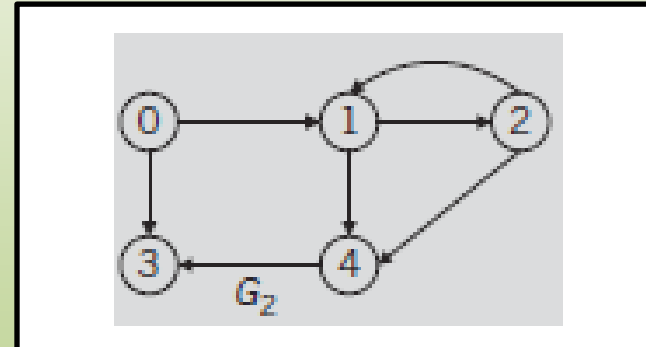
*Some content from Data Structures Using C++ (D.S. Malik)*



# Graded In-Class Activity: ICA 340

Create a text file that is formatted to work with the below code  
*File should represent the graph shown*

```
void graphType::createGraph()
{
    ifstream infile;
    char fileName[50];
    int vertex;
    int adjacentVertex;
    if (gSize != 0) // if the graph is not empty,
        clearGraph(); // make it empty
    cout << "Enter input file name: ";
    cin >> fileName;
    cout << endl;
    infile.open(fileName);
    if (!infile)
    {
        cout << "Cannot open input file." << endl;
        return;
    }
}
```



```
infile >> gSize; //get the number of vertices
for (int index = 0; index < gSize; index++)
{
    infile >> vertex;
    infile >> adjacentVertex;
    while (adjacentVertex != -999)
    {
        graph[vertex].insertLast(adjacentVertex);
        infile >> adjacentVertex;
    } //end while
} // end for
infile.close();
} //end createGraph
```