

Project 2 Documentation

Adding the files to general

In command prompt enter:

```
scp C:\Users\rjuli\Downloads\template_code.zip  
jreyell15@general.asu.edu:~
```

It will add the file to asu general server

Once it is added, you can ssh into general in the terminal, or go into vs code bash terminal to unzip the file with:

```
unzip template_code.zip
```

Once you see this then you should be able to see the files in vs code general:

```
bash-5.2$ unzip template_code.zip  
Archive:  template_code.zip  
  creating: template_code/  
  inflating: __MACOSX/._template_code  
  inflating: template_code/Vertex.h
```

etc ...

.
.
.
.

The process can be repeated for adding the test cases

In command prompt:

```
scp C:\Users\rjuli\Downloads\test_cases-2.zip  
jreyell15@general.asu.edu:~
```

In vs code or ssh from command prompt:

```
unzip test_cases-2.zip
```

Adding files to github

Log into the asu general server in vs code or in terminal

In terminal, put in the github key with:

```
git clone https://github.com/Mysttt09/The-Dijkstra-s-Project.git
```

This will create a new folder in vs code

You can cd into it in vs code or in terminal with:

```
cd dijkstra-project
```

Or you can click it when you see it on vs code

Committing changes to github

```
git config --global user.name "Mysttt09"  
git config --global user.email "julier10028@gmail.com"
```

Input:

```
bash-5.2$ git config --global user.name "Mysttt09"  
git config --global user.email "julier10028@gmail.com"
```

Output:

```
bash-5.2$ git config --list  
user.name=Mysttt09  
user.email=julier10028@gmail.com  
bash-5.2$
```

Go into source control

Stage the changes you would want to commit

Staging means you could pick which changes you want to be transferred. This can be good if you are still working on it and it is messy.

Once the stages have been picked, commit the changes

Terminal:

Always commit changes you want transferred.

Commit to your branch

We will have three branches, main, Julie, and Shukri.

Pushing the commit to the Julie branch

Terminal:

```
git status          # See what's changed
git add .           # Stage all changes
git commit -m "Your commit message here"
git push origin your-branch-name
```

```
git status
git add .
git commit -m "This is where Julie's code for the odd vertices and algorithm will go"
git push origin Julie
```

This did not work, ^

Use this :

```
git status
git checkout Julie    # Switch to Julie branch
git merge main        # Merge main into Julie
git push origin Julie # Push changes to GitHub
```

```
git status
git checkout Julie
git merge main
git push origin Julie
```

In VS code:

Go into source control

In the three dots next to changes, click check out to...

Pick the Julie branch in the search bar

From the same three dots: branch>merge

Click the main branch from the search bar, to merge the main branch with the Julie branch

Errors

```
bash-5.2$ git branch
```

```
fatal: not a git repository (or any parent up to mount point /)
```

```
Stopping at filesystem boundary (GIT_DISCOVERY_ACROSS_FILESYSTEM not set).
```

```
bash-5.2$
```

Solution:

Had to cd into the project file

```
Main.cpp:95:19: error: request for member 'getDegree' in 'vertices', which is of non-class type  
'Vertex [numOfVertices]'
```

```
95 |     if ((vertices.getDegree() % 2) != 0)
```

Solution:

Had to do vertices[i] to access the degree in position i

Merging specific files

```
git checkout feature-branch      # Make sure you're on your target branch
```

```
git checkout main -- path/to/file.txt  # Pull specific file from main into current branch
```

Multiple files

- Make sure to cd into project folder

```
git checkout main -- file1.txt dir/file2.js
```

Then commit

```
git add .  
git commit -m "Pulled specific files from main"
```

Apply:

```
git checkout main  
ls -R | grep -i graph #with i meaning case sensitive
```

*use the output of `ls -R | grep -i graph` this as your graph path for `git checkout main--graph path`

```
git checkout Julie  
git checkout main -- Graph.cpp dir/Graph.h  
  
git add .  
git commit -m "Pulled Graph.cpp and Graph files from main"
```

- Make sure to cd into project folder

```
cd The-Dijkstra-s-Project
```

```
cd /afs/asu.edu/users/j/r/e/jreye115/The-Dijkstra-s-Project
```

Run the project with the test case:

```
./dijkstra < small-network.txt
```

Debugger troubles

Make a launch json file

Change the following lines

```
"program": "enter program name, for example ${workspaceFolder}/a.out",
```

To

```
"program": "${workspaceFolder}/dijkstra",
```

Makes sure it says this for cwd

```
"cwd": "${workspaceFolder}",  
"externalConsole": true,
```

Set to true to be able to read input from txt files

```
{  
    // Use IntelliSense to learn about possible attributes.  
    // Hover to view descriptions of existing attributes.  
    // For more information, visit:  
https://go.microsoft.com/fwlink/?linkid=830387  
    "version": "0.2.0",  
    "configurations": [  
        {  
            "name": "(gdb) Launch",  
            "type": "cppdbg",  
            "request": "launch",  
            "program": "${workspaceFolder}/./dijkstra",  
            "args": [],  
            "stopAtEntry": false,  
            "cwd": "${workspaceFolder}",  
            "environment": [],  
            "externalConsole": true,  
            "MIMode": "gdb",  
            "setupCommands": [  
                {  
                    "description": "Enable pretty-printing for gdb",  
                    "text": "-enable-pretty-printing",  
                    "ignoreFailures": true  
                },  
            ],  
        },  
    ],  
}
```

```

        {
            "description": "Set Disassembly Flavor to Intel",
            "text": "-gdb-set disassembly-flavor intel",
            "ignoreFailures": true
        }
    ]
}
]
}

```

Make sure you are in your project folder, and not in the jreye115 folder

Code

Odd vertices

Got this output

Odd Vertices:

```

0
0
0
0
4096
0
1856813816
32546
1858478976
32546

```

It's not reading the numbers correctly...

Code:

```

cout << "Odd Vertices: ";

for (int i = 0; i < 10; i++){

    cout << oddVertices[i] << " ";
}

```

```
cout << endl;  
  
}
```

Had the number 10 instead of i

It is printing normal numbers now