# Programing Assignment #1 - README

CSCE 625 - Artificial Intelligence
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Name: Xiaoshu Zhang

Email: kallen5208@gmail.com

1. The source code I turned in is named "Search.java". Open a Command Prompt, enter the folder where "Search.java" is located. Compile with command "javac Search.java"(shown in Figure 1). Files named "Search.class" and "Vertices.class" should be generated(shown in Figure 2).


Figure 1

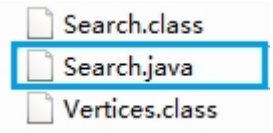


Figure 2

2. Then you need a graph to test with. Put the graph data in the same folder. You can either use "data.txt" or any other name as the graph's name(for example, "ATM.graph data file") (shown in Figure 3). The inside of the graph data should look like Figure 4.

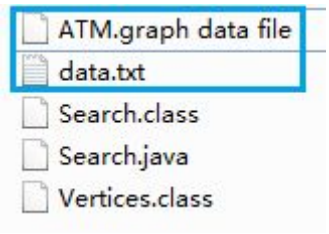


Figure 3

```
vertices: 275
0 1 1
1 1 2
2 1 3
...
edges: 641
0 17 18
1 37 38
2 56 57
...
```

Figure 4

3. Then run with command "java Search". It should show you three selections(shown in Figure 5).


Figure 5

4. If you want to run BFS, you can type 1 and press enter. Then it should request you to select a graph(shown in Figure 6). If your graph data is named "data.txt", you can enter 1 and press enter(shown in Figure 7). If your graph data is name "ATM.graph data file", you need to enter 2 and press enter, then type in "ATM.graph data file"(without qoutation) and press enter(shown in Figure 8).


Figure 6

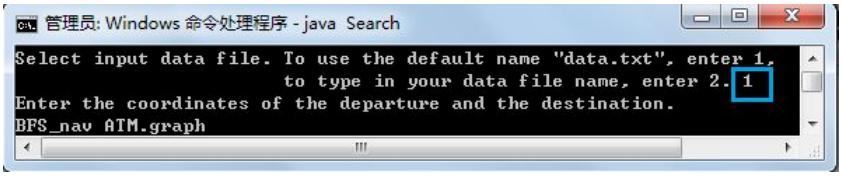


Figure 7

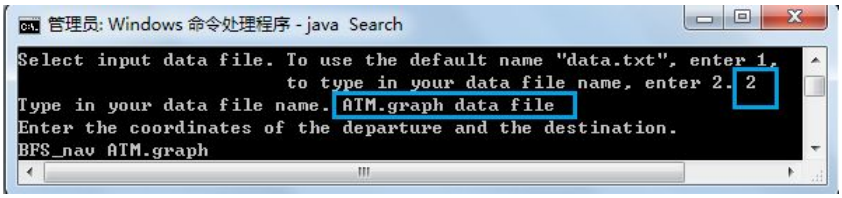


Figure 8

5. Then you enter the coordinates of the departure and the destination, then press enter(shown in Figure 9).

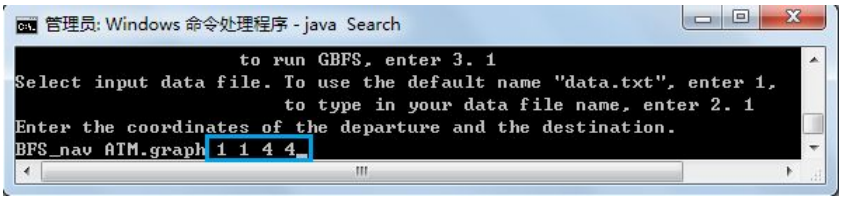


Figure 9

6. Then BFS will work and show you the result both in this window(shown in Figure 10), and create a file named "BFS_Search.txt"(shown in Figure 11). If the file named "BFS_Search.txt" already exits, the new result will be appended, not erase the original content.

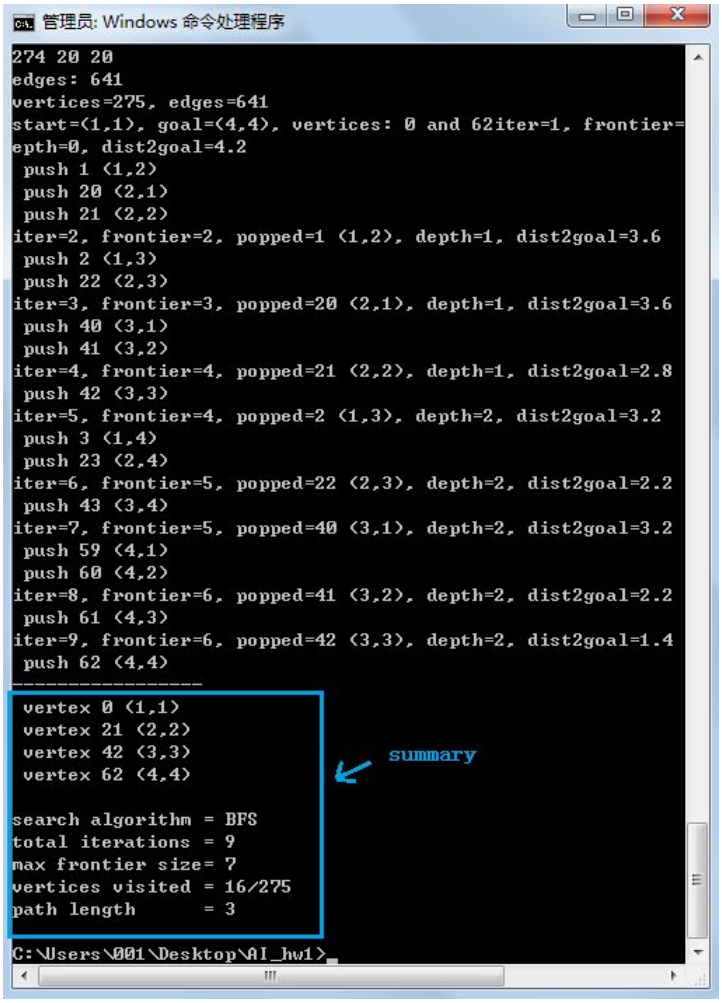


Figure 10

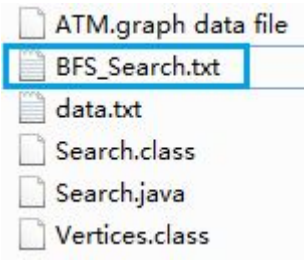


Figure 11

7. If you select DFS or GBFS, it will generate "DFS_Search.txt" and "GBFS_Search.txt", separately(shown in Figure 12).

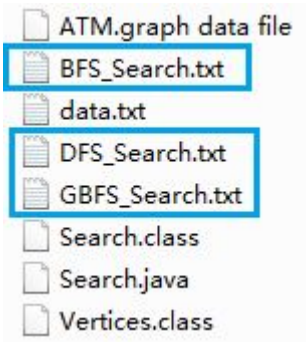


Figure 12