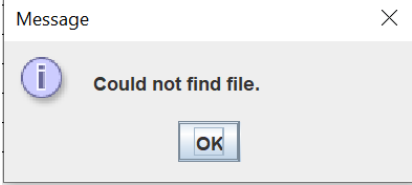
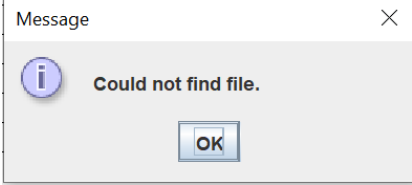



Test Case	Input	Expected Output	Actual Output	Pass?
1	ClassA ClassC ClassE ClassJ ClassB ClassD ClassG ClassC ClassA ClassE ClassB ClassF ClassH ClassJ ClassB ClassI ClassC	A graph with circular dependencies *See output picture and description below*	A graph with circular dependencies *See output picture and description below*	Yes
2	ClassA ClassC ClassE ClassJ ClassB ClassD ClassG ClassE ClassB ClassF ClassH ClassJ ClassB ClassI ClassC	A graph with no circular dependencies *See output picture and description below*	A graph with no circular dependencies *See output picture and description below*	Yes
3	ClassA ClassC ClassE ClassJ ClassB ClassD ClassG ClassC ClassA ClassE ClassB ClassF ClassH ClassJ ClassB ClassI ClassC ClassZ ClassC ClassQ	A graph with unreachable classes *See output picture and description below*	A graph with unreachable classes *See output picture and description below*	Yes
4	ClassA ClassC ClassE ClassJ ClassB ClassD ClassG ClassC ClassA ClassE ClassB ClassF ClassH ClassJ ClassB	A graph with no unreachable classes *See output picture and description below*	A graph with no unreachable classes *See output picture and description below*	Yes
5	*Click improper file*			Yes

Test Case 1 Output

Shown below, test case 2 displays an example of a graph with circular dependencies. The * next to ClassC proves that ClassC depends on ClassA and ClassA depends on ClassC

```

 TestCase1.txt - Notepad
File Edit Format View Help
ClassA ClassC ClassE ClassJ
ClassB ClassD ClassG
ClassC ClassA
ClassE ClassB ClassF ClassH
ClassJ ClassB
ClassI ClassC


ClassA
  ClassC *
  ClassE
    ClassB
      ClassD
      ClassG
    ClassF
    ClassH
  ClassJ
    ClassB
      ClassD
      ClassG

( ClassA ( ClassC * ClassE ( ClassB ( ClassD ClassG ) ClassF ClassH ) ClassJ ( ClassB ( ClassD ClassG ) ) ) )
ClassI is unreachable
```

Test Case 2 Output

Shown below, test case 2 displays an example of a graph without circular dependencies. Notice there is no * shown in the output.

```

 TestCase2.txt - Notepad
File Edit Format View Help
ClassA ClassC ClassE ClassJ
ClassB ClassD ClassG
ClassE ClassB ClassF ClassH
ClassJ ClassB
ClassI ClassC
```

```

ClassA
  ClassC
  ClassE
    ClassB
      ClassD
      ClassG
    ClassF
    ClassH
  ClassJ
    ClassB
      ClassD
      ClassG


( ClassA ( ClassC ClassE ( ClassB ( ClassD ClassG ) ClassF ClassH ) ClassJ ( ClassB ( ClassD ClassG ) ) ) )

ClassI is unreachable

```

Test Case 3 Output

Shown below, test case 3 displays an example of a graph with multiple unreachable classes. This is shown at the bottom where ClassI, ClassZ, and ClassQ are all noted to be unreachable.

 TestCase3.txt - Notepad

```

File Edit Format View Help
ClassA ClassC ClassE ClassJ
ClassB ClassD ClassG
ClassC ClassA
ClassE ClassB ClassF ClassH
ClassJ ClassB
ClassI ClassC
ClassZ ClassC ClassQ

```

```

ClassA
  ClassC *
  ClassE
    ClassB
      ClassD
      ClassG
    ClassF
    ClassH
  ClassJ
    ClassB
      ClassD
      ClassG


( ClassA ( ClassC * ClassE ( ClassB ( ClassD ClassG ) ClassF ClassH ) ClassJ ( ClassB ( ClassD ClassG ) ) ) )

ClassI is unreachable
ClassZ is unreachable
ClassQ is unreachable

```

Test Case 4 Output

Shown below, test case 3 displays an example of a graph with no unreachable classes. Notice that unlike the other test cases, there are is no output after the parenthesized list.

 TestCase4.txt - Notepad

File Edit Format View Help

```
ClassA ClassC ClassE ClassJ
ClassB ClassD ClassG
ClassC ClassA
ClassE ClassB ClassF ClassH
ClassJ ClassB
```

```
ClassA
  ClassC *
  ClassE
    ClassB
      ClassD
      ClassG
    ClassF
    ClassH
  ClassJ
    ClassB
      ClassD
      ClassG

( ClassA ( ClassC * ClassE ( ClassB ( ClassD ClassG ) ClassF ClassH ) ClassJ ( ClassB ( ClassD ClassG ) ) ) )
```

Test Case 5 Output (Error Testing)

Test case 1 displays the output that is shown if the user does not click a proper file to output.

