# CSCD 210
## Lab 9

Provided is CSCD210Lab9.java that is an unchangeable Java file.  Your task is to complete the program based on the specifications below.

- You will prompt the user for the name of the input file.  You must ensure the file exists, if it does not you must reprompt..
- You will open that file and count the number of records in the file.  There will be one string per line. The string may contain spaces
- You will create and fill an array of type String for each String that is in the file. The file will contain strings, one string per line.  The string may contain spaces
- The array is then sorted by calling the compareTo of String and you must use the provided selection sort method
- After the array is sorted, the information is printed to the screen, each string will be on a separate line. Your output to the screen will be in the format similar as your input file.
- The above is repeated passing in a String as the file name
- The above is repeated passing in a bad String as the filename.  This will cause a program ending exception.

## NOTES
- See the provided API – you must write all the methods specified in the API
- All parameters passed to a method will be final
- All preconditions for the method will be checked
- You may NOT assume the input file specified by the user exists. If it does not, print an error message and re-prompt the user for an input file name.
- You must create an input file that allows you to sufficiently test the specifications of this lab.
- You can't change my imports or classes in any fashion.
- I have provided the Javadoc which contains more details, please refer to the Javadoc.

## TO TURN IN
A zip file, in Canvas, by the required due date containing Lab9-Files folder:
- all java files in the proper packages
- the input file(s) used to test your program
- a test run named cscd210lab9out.txt – testing all aspects

We should be able to download the zip and compile your code, and then run your code.

Name your zip, your last name first letter of your first name lab9.zip (Example: steinerslab9.zip)

**Sample Run**
```
Please enter the name of the file words.txt
a
aardvark
aback
abacus
abaft
abalone
abandon
abandoned
abase
abash
abate
azure
b
babble
babe
babel
baboon
babushka
baby
baccalaureate
bacchanalia
bachelor
bacillus
back

adversativeconjunction
anthropomorphologically
antidisestablishmentarianism
antiestablishmentarians
beating around the bush
carboxymethylcelluloses
chlorotrifluoroethylene
cyclotrimethylenetrinitramine
deinstitutionalizations
dichlorodifluoromethane
electroencephalographic
electrophotomicrography
ethylenediaminetetraacetates
floccinaucinihilipilification
hexamethylenetetramines
hydrochlorofluorocarbon
hypobetalipoproteinemia
magnetohydrodynamically
methylenedioxymethamphetamine
microspectrophotometric
penny for your thoughts
polytetrafluoroethylene
thymolsulphonephthalein
transubstantiationalist

Exception in thread "main" java.lang.RuntimeException: File could not be opened
	at lab9.cscd210utils.FileUtils.openInputFile(FileUtils.java:118)
	at lab9.cscd210lab9.CSCD210Lab9.main(CSCD210Lab9.java:51)
```