**Max Rink:**

**Unit 4 Assignment**

**Specification**

A program with the ability to merge two files together. The program first gets the name of the first file then gets the name of the second file. The program then gets the name the user wants the third file to be called. The program then merges the first two files into the third file. The program orders the merged number from smallest to largest. The program decides what file to read from and which to write to the third file based on which is smallest.

**Algorithm**

1. Get file names from the user
2. Open the specified files
3. Read the contents of the first two files
4. Order the content of the files
5. Decide which file to write data from
6. Continue this process
7. Write the remaining data
8. Write the contents of the first two files to the third file

**Flowchart**

See the included flowchart file

**Code Design**

**Class** –

The class is used to create a custom data type and allow the program to have instances of it

**File** –

The File class is used to manage files

**FileWriter** –

The file writer is used to open a file for writing

**BufferedWriter** –

The buffered writer is used to write to the file

**FileReader** –

The file reader is used to open file for reading

**BufferedReader** –

The buffered reader is used to read file contents

**While** –

The while loop is used to loop code until some condition is met

**Try-Catch** –

The try catch is used to catch errors in order to continue running the code

whence an error has occurred

**Implementation**

See the java files

**Testing and Debugging**

No testing was needed or bugs encountered in the development of this program