

Selection sort to a File.

- Make this code so all output – except the initial data entry – is to a file.



```
import java.io.*;
public class selectionSortFile
{
    public static void main (String args[])
    { //Create the array
        int a[] = new int [10];
        for (int i = 0 ; i < a.length ; i++)
        {
            a [i] = IO.inputInt ("Enter a[" + i + "]: ");
        }
        PrintWriter out;
        try
        {
            out = new PrintWriter (new FileWriter ("BubbleSortFile.txt"));
            //Prints the array before it runs
            System.out.println ("\nBefore Selection Sort is Run: ");
            for (int i = 0 ; i < a.length ; i++)
            {
                System.out.print (a [i] + " ");
            }
            System.out.println ();
            //Run bubble sort
            System.out.println ("\nTracing Selection Sort:");

            int numUnsorted = a.length;
            int max; //index of largest value

            while (numUnsorted > 0)
            {
                //determine maximum value in array
                max = 0;
                for (int index = 1 ; index < numUnsorted ; index++)
                {
                    if (a [max] < a [index])
                        max = index;
                }
            }
        }
    }
}
```

```
int temp = a [max];
a [max] = a [numUnsorted - 1];
a [numUnsorted - 1] = temp;
numUnsorted--;
for (int i = 0 ; i < a.length ; i++)
{
    System.out.print (a [i] + " ");
}
System.out.println ();
}

System.out.println ();
//print out the array after
System.out.println ("After Selection sort is Finished: ");
for (int i = 0 ; i < a.length ; i++)
{
    System.out.print (a [i] + " ");
}
System.out.println ();
out.close ();
}
catch (IOException e)
{
    System.out.println ("Error opening file " + e);
}
}
}
```