CS116 – Activity 7

Take a look at the following two functions:

```
def soundToFile(sound,fileName):
  file = open(fileName,"wt")
  for s in getSamples(sound):
    value = getSampleValue(s)
    file.write(str(value)+'\n')
  file.close()

def fileToSound(fileName):
  file = open(fileName,"rt")
  sound = makeEmptySound(50000)
  line = file.readline()
  index = 0
  while line <> "":
    setSampleValueAt(sound,index,int(line))
    index += 1
    line = file.readline()
  file.close()
  return sound
```

The first function takes a sound and a filename and writes out all the sound sample to the file. Try it out. Take a look at the contents of the file that was produced!

The second function can now take that text file of numeric values and make it into a sound object. Try it out.

Answer the following questions about the code:

1. In `soundToFile` what does the `'\n'` in the write accomplish?

2. In `fileToSound` why do we create an empty sound with 50000 samples? Could this be a problem?

3. Why do we have a `while` loop rather than a `for` loop? How does a `while` behave?