1. **cochlearProc.m** This function is used to run your simulation. It requires two parameters: -
   - soundFileName: the name of a .wav file containing sound of any length up to 60 seconds in duration and
   - processingType: a choice of stimulation strategy (1 = F0F1F2, 2 = SPEAK, 3 = CIS).

This function will create the following output files:-

<processing name>.csv	Stimulus file
<processing name>.jpg	Electrodogram
<processing name>_speech.jpg	Speech plot
<processing name>.wav	Vocoded reconstruction of sound from the stimulus file

<processing name> will be replaced by the relevant string. For example 'F0f1f2'

Initially these files will be blank or empty. When you have written the functions below then the files will contain the results of your simulation.

2. **classCochlear.m** – This file contains the definitions of 6 functions that you must write. Each function header contains comments to explain what the function should do. The functions that you will write are:

getWav()	getFTM()	process()
applyDR()	plotSignal()	plotElectrodogram()

3. **classCochlearSupport.m** – This file contains some helper functions and data. For example…

```
fSample      = 16000; % required sampling frequency
fTolerance   = 0.1;   % allowed variation from fSample
tSample      = 0.002; % sample time for cochlear implant processing
frameOverlap = 3/4;   % required overlap when using Hann window
numElectrodes= 16;    % number of electrodes in cochlear implant
numFormants  = 2;     % formants used by the F0F1F2 strategy
dynamicRange = 10;    % dB
maxOutput    = 1024;

function result = procName(obj, procType)
% return string containing the name of the process type <procType>
```

To access the data/function use the syntax obj.<name> eg obj.numElectrodes.

This file also contains functions used by cochlearProc.m such as writeCsv(), writeJpg() and vocoder().

You are welcome to inspect these and any functions provided. You should not change any provided functions or data definitions as any changes outside classCochlear.m are not submitted for testing.