## Speech and Image Processing - Lab 3

Date: 23 September 2019

**Task description:**

**Part (a)** (8 Marks)

Write a Linux bash script audio\_segmenter.sh that takes a set of \*.wav and/or \*.mp3 files (each of several minutes) and breaks them into chunks of 10 seconds each and saves numerically in corresponding directory (named after the original wav file). For elaboration see below:

Input

somefile.wav

anotherfile.mp3

voice22.wav

[...]

thataudio.wav

Output

somefile/1.wav

somefile/2.wav

somefile/3.wav

[...]

somefile/27.wav

anotherfile/1.wav

anotherfile/2.wav

[...]

anotherfile/55.wav

voice22/1.wav

[...]

thataudio/32.wav

The input files way be in any \*.wav or \*.mp3 format, but the output 10-second segments should be in “ \*.wav 16KHz mono signed 16-bit” format. Only bash scripts and command line tools can be used, but not python or C language.

Hints:

* Bash scripting supports for loops, if constructs etc. like other programming languages
* If the bash script is not executing, set its executable permission by chmod command
* wav or mp3 extension can be removed from folder names by using sed tool
* For breaking audio into segments, and converting to required format, sox tool can be used

**Deliverables: bash script audio\_segmenter.sh**