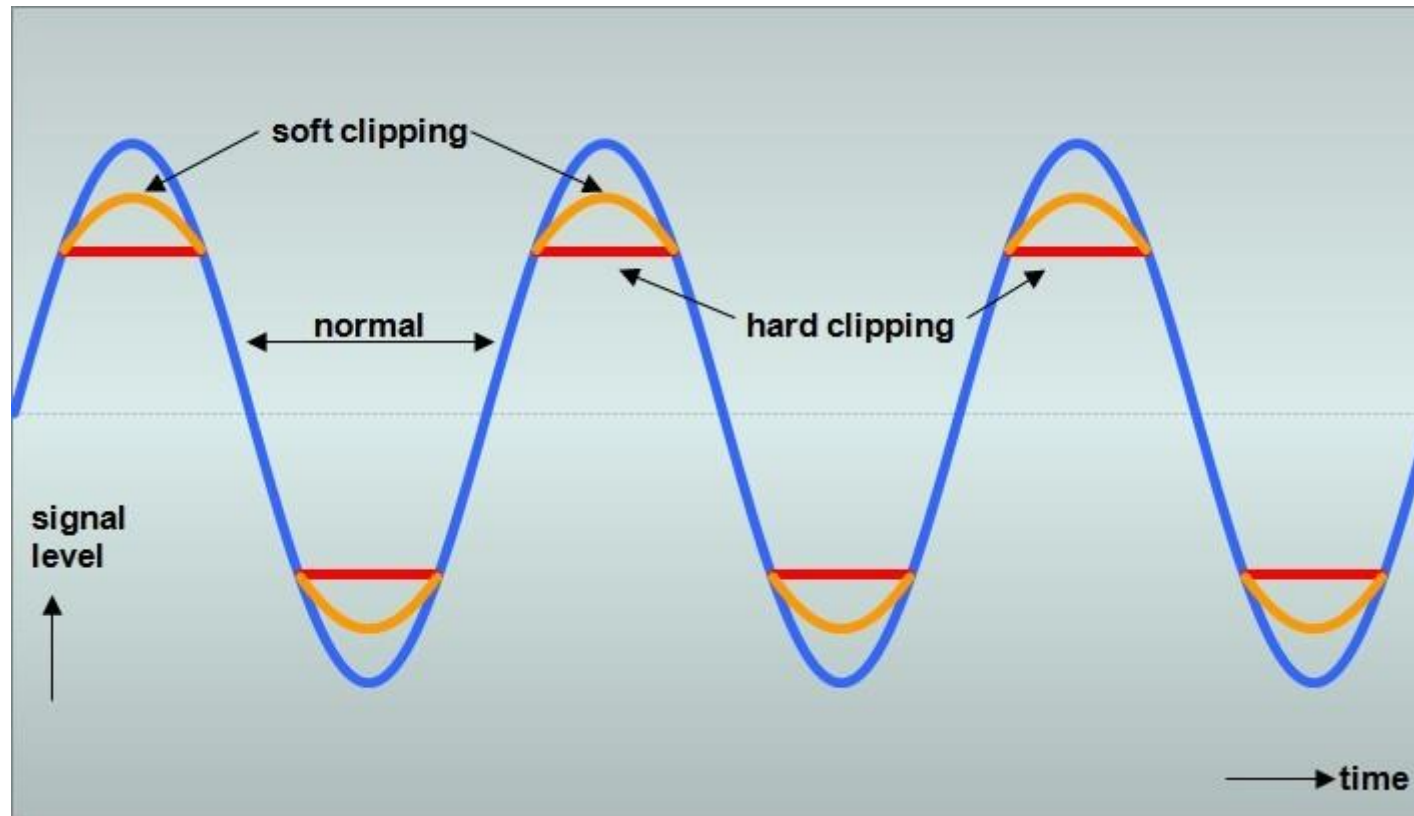


可參數化的吉他失真效果器



Distortion



作業說明

- 1.hard clipping

$$y = \begin{cases} \textit{upperbound}, & y > \textit{upperbound}. \\ y, & \textit{lowerbound} \leq y \leq \textit{upperbound} \\ \textit{lowerbound}, & y < \textit{lowerbound}. \end{cases}$$



作業說明

- 2.Soft clipping

$$y = \begin{cases} upperbound + a(y - upperbound), & y > upperbound. \\ y, & lowerbound \leq y \leq upperbound \\ lowerbound + a(y - lowerbound), & y < lowerbound. \end{cases}$$



- [scipy.io.wavfile.read](https://docs.scipy.org/doc/scipy/reference/io_module.html#wavfile-read)

WAV format	Min	Max	NumPy dtype
32-bit floating-point	-1.0	+1.0	float32
32-bit PCM	-2147483648	+2147483647	int32
16-bit PCM	-32768	+32767	int16
8-bit PCM	0	255	uint8



注意事項

- 繳交期限**2018/4/11 17:00**(五點以前驗收繳交為 A 。Office Hour結束之前繳交為B 。當周日午夜前繳交為C 。之後以缺交論F 。)
- 作業請繳交至FTP : 140.116.82.230
 - username : signalssystem107
 - password : screamlab
- 格式
 - 所有程式限定使用Python , Matlab或是C語言
 - 命名規格(壓縮檔標題) :lab5_學號_姓名_vX (X為版本號)
 - Ex:lab5_F71234567_王大明_v1
 - 內容 :distortion_hard_clipping.py 、 distortion_soft_clipping.py 、 distortion_hard_clipping.wav 、 distortion_soft_clipping.wav

