

DTMF Detector

- *SINES* : *const int[]*
- *COSINES* : *const int[]*
- *RESPONSE_LOOKUP* : *const int[]*
- *BUTTONS* : *const char[]*
- *samples_frame* : *int[]*

- + *add_sample*(*sample* : *int*)
- + *do_dtmf*() : *char* ○
- *goertzel* (*tone* : *int*) : *int*
- *analyze_responses*(*responses* : *int[]*) : *int*

```
For all tones {  
    tone_responses[tone] = goertzel(tone);  
}  
  
detected_signal =  
    analyze_responses( tone_responses);  
  
If detected_signal is invalid  
    return 'I';  
else  
    return BUTTONS[detected_signal];
```