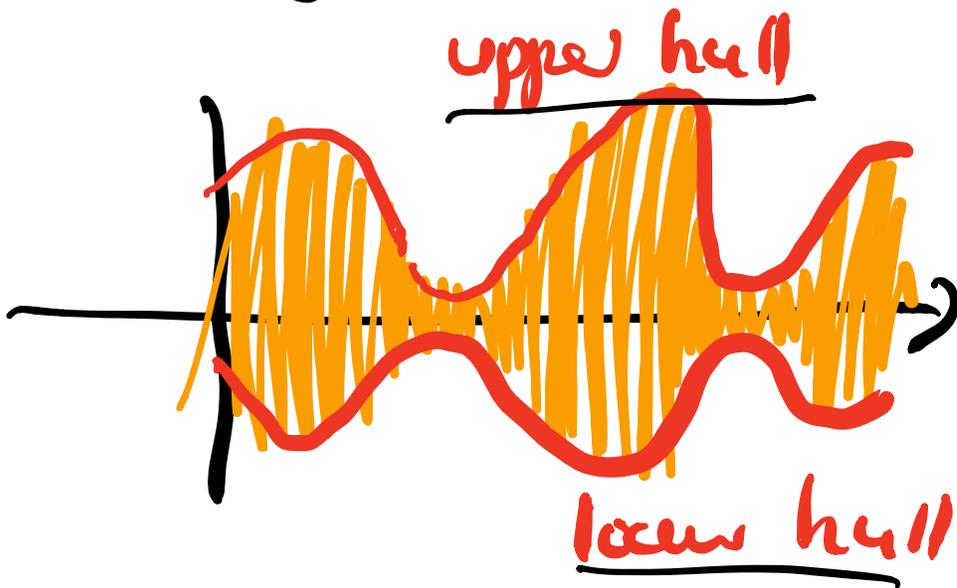
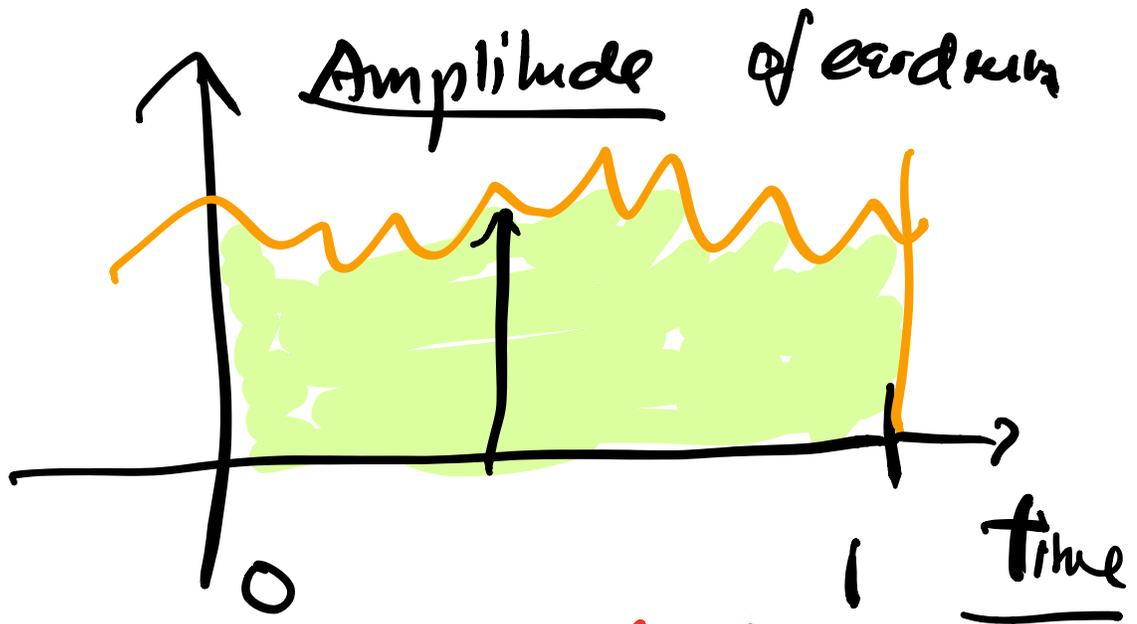


Unit 33

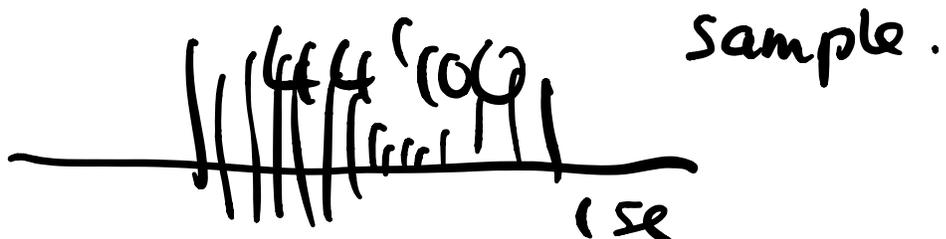
Music

- ① Songse → Functions
- ② How to access the data → demo
- ③ Midi function
- ④ Suavis gravitatis
→ Stiae, Eale

① Songs and functions



② **Accessing the data**



3) Midi

$$f(s) = 440 \cdot 2^{\frac{(s-69)}{12}}$$

midi number

$$\frac{(s-69) \log 2}{12}$$

$$f(s) = 440 e$$

frequency

$$s = 69 : f = 440$$

your task:

Find S from f

$$S = \frac{12}{\log 2} \log \left(\frac{f}{440} \right)$$

+ 69