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#assign 4

def openSoundOrPicture():
  file = pickAFile()
  length = len(file)
  period = file.rfind('.')
  if file.endswith(".jpg") :
    printNow("You selected a .jpg picture file")
    show(makePicture(file))
    #printNow("type is :"+ file[period+1:length])
  elif file.endswith(".wav") :
    printNow("You selected a .wav sound file")
    play(makeSound(file))
    #printNow("type is :"+ file[period+1:length])
  else :
    printNow("Oh oh! Did not choose a picture or sound file")
    printNow("type is : "+file[period+1:length])




def smoothSound(file,x):

  import random
  maxAmp = x
  noisy = makeEmptySound(65000)
  for s in getSamples(noisy):
    setSample(s, random.randrange(-maxAmp, maxAmp+1))
  f = pickAFile()
  sound = makeSound(f)
  SSamples = 0
  BSamples = 0
  BSound = 0
  Num1Samples = getNumSamples(sound)
  Num2Samples = getNumSamples(noisy)

  if Num1Samples < Num2Samples :
    SSamples = Num1Samples
    BSamples = Num2Samples
    BSound = 2
  else :
    SSamples = Num2Samples
    BSamples = Num1Samples
    BSound = 1

  addedSound = makeEmptySound(BSamples)
  for sampleNumber in range(BSamples):
    if sampleNumber < SSamples :
      sample1 = getSampleValueAt(sound, sampleNumber)
      sample2 = getSampleValueAt(noisy, sampleNumber)
      setSampleValueAt(addedSound, sampleNumber, sample1 + sample2)
    else :
      if BSound == 1 :
        sample1 = getSampleValueAt(sound, sampleNumber)
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      setSampleValueAt(addedSound, sampleNumber, sample1)
    else :
      sample2 = getSampleValueAt(noisy, sampleNumber)
      setSampleValueAt(addedSound, sampleNumber, sample2)
#play (addedSound)
openSoundTool(addedSound)

reduceSound = makeEmptySound(BSamples)
for sampleNumber in range(BSamples):
  if sampleNumber < SSamples:
    sample1 = getSampleValueAt(sound,sampleNumber)
    sample2 = getSampleValueAt(addedSound,sampleNumber)
    setSampleValueAt(reduceSound,sampleNumber,(sample1+sample2)/2)
#play (reduceSound)

openSoundTool(reduceSound)
smoothSound = makeEmptySound(BSamples)
for sampleNumber in range(BSamples):
  if sampleNumber < SSamples :
    sample1 = getSampleValueAt(sound,sampleNumber)
    sample2 = getSampleValueAt(reduceSound,sampleNumber)

    setSampleValueAt(smoothSound,sampleNumber,(sample1+sample2)/2)

#play(smoothSound)
openSoundTool(smoothSound)
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