Programming with Sounds, Part 2

Exercise 4
Splicing is putting two or more sounds together, one after another.

4.1: Write a splice function that takes 2 sounds as parameters and returns a sound. Test it by splicing together aah.wav and Elliot-hello.wav.

4.2: Write another function that takes 2 sounds as parameters, splices them together with 1 second of silence between them, and returns the sound. Test it by splicing together aah.wav and Elliot-hello.wav.

Exercise 5
Blending sounds is like playing them at the same time, each one at half amplitude. To blend two sounds, you average the values of each sample point.

Write a function that takes two sounds as parameters and returns a sound that is a blend of the two sounds. If the sounds are of different lengths, the new sound can be the length of the shorter one (or even shorter if you want).

Detail: to generate the $n^{th}$ sample point of a blend of sound1 and sound2, add the $n^{th}$ sample point of sound1 divided by 2 and the $n^{th}$ sample point of sound2 divided by 2.

Test your function with aah.wav and bassoon-c4.wav.