**Exercise 3.0.5**

**A screenshot of a computer

AI-generated content may be incorrect.**

I decided to create loops to calculate the shortest time in between earthquakes. I elected to use the first value in the sequence is the initial value, since if I used 0, it would end up being the smallest value since all gamma random variables are positive. This function updates by comparing the most recent output to the current smallest. If the new one is the smallest, that becomes the new minimum value. The reduce function was noticeably faster.

**Exercise 3.8.1**

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Exercise 3.8.2**

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer

AI-generated content may be incorrect.**