3. Use the function manyFastRandomWalks defined above to find out the average length of a random walk (averaged over 1000 simulations) for (i) n = 100; jump = 2, (ii) n = 200; jump = 5, and (iii) n = 500; jump = 10.

Answer:

i. n = 100; jump = 2; numRepetition = 1000
   Average length is 7113
ii. n = 200; jump = 5; numRepetition = 1000
   Average length is 13218
iii. n = 500; jump = 10; numRepetition = 1000
   Average length is 42053

5. Use the function manyFastRandomWalks defined above to find out the average length (aver-aged over 1000 simulations) of the new type of random walk (defined in the above problem)for (i) n = 100; jump = 2, (ii) n = 200; jump = 5, and (iii) n = 500; jump = 10.

Answer:

i. n = 100; jump = 2; numRepetition = 1000
   Average length is 7208
ii. n = 200; jump = 5; numRepetition = 1000
   Average length is 12990
iii. n = 500; jump = 10; numRepetition = 1000
   Average length is 41491