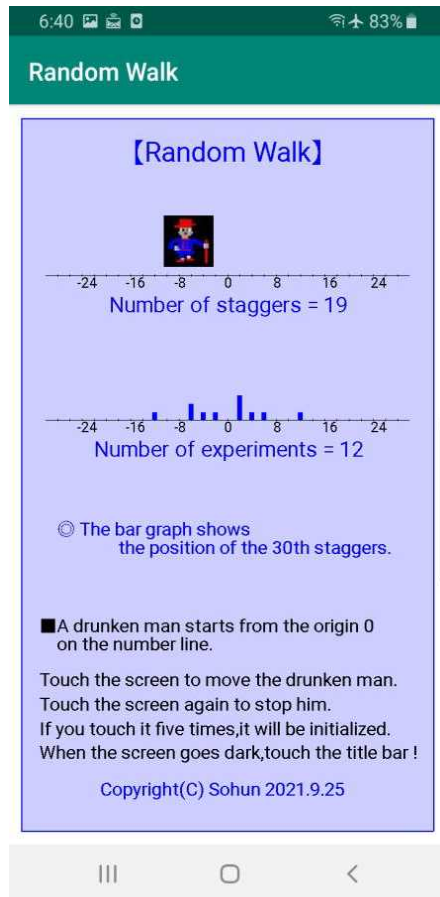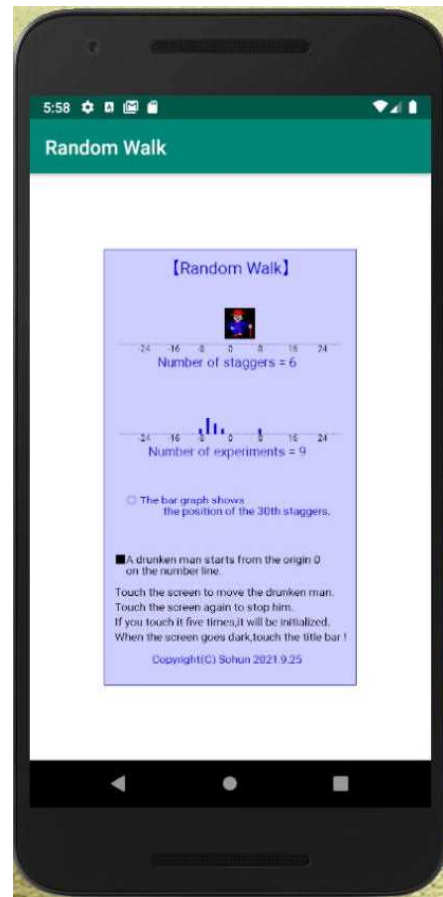# 【Random Walk】

※　When a drunk man sways from side to side , observe the 30th swaying position.

【Screenshot】
Galaxy S9

【Emulator image】
Android Studio Version 3.5.1

［Outline］

You can observe the footsteps of a drunk man.

A drunk man wanders from side to side indiscriminately. A drunk man may come back to the same place many times while walking to reach his destination.

Now , the drunk man is at the origin on the number line. Where is a drunk man on the number line when he wanders 30 times starting from the origin ?

However , it is assumed that a drunk man sways only in two direction , left and right , and moves only one with one sway. Also , assume that a drunk man sways to the left or to the right in half.

Let's mathematically find the probability that the position on the number line when a drunk man staggers 30 times is 0 , the probability that it is 1 , and the probability that it is 2.