SHOW ALL YOUR WORK. REMEMBER THAT PROGRAM SEGMENTS ARE TO BE WRITTEN IN JAVA.

Assume that the classes listed in the Java Quick Reference have been imported where appropriate. Unless otherwise noted in the question, assume that parameters in method calls are not `null` and that methods are called only when their preconditions are satisfied.
In writing solutions for each question, you may use any of the accessible methods that are listed in classes defined in that question. Writing significant amounts of code that can be replaced by a call to one of these methods will not receive full credit.

This question involves the implementation of a fitness tracking system that is represented by the `StepTracker class`. A `StepTracker` object is created with a parameter that defines the minimum number of steps that must be taken for a day to be considered *active*.

The `StepTracker` class provides a constructor and the following methods.

`addDailySteps`, which accumulates information about steps, in readings taken once per day
`activeDays`, which returns the number of active days
`averageSteps`, which returns the average number of steps per day, calculated by dividing the total number of steps taken by the number of days tracked

The following table contains a sample code execution sequence and the corresponding results.

Statements and Expressions	Value Returned (blank if no value)	Comment
StepTracker tr = new StepTracker(10000);		Days with at least 10,000 steps are considered active. Assume that the parameter is positive.
tr.activeDays();	0	No data have been recorded yet.
tr.averageSteps();	0.0	When no step data have been recorded, the averageSteps method returns 0.0.
tr.addDailySteps(9000);		This is too few steps for the day to be considered active.
tr.addDailySteps(5000);		This is too few steps for the day to be considered active.
tr.activeDays();	0	No day had at least 10,000 steps.
tr.averageSteps();	7000.0	The average number of steps per day is $(14000 / 2)$.
tr.addDailySteps(13000);		This represents an active day.
tr.activeDays();	1	Of the three days for which step data were entered, one day had at least 10,000 steps.
tr.averageSteps();	9000.0	The average number of steps per day is $(27000 / 3)$.
tr.addDailySteps(23000);		This represents an active day.
tr.addDailySteps(1111);		This is too few steps for the day to be considered active.
tr.activeDays();	2	Of the five days for which step data were entered, two days had at least 10,000 steps.
tr.averageSteps();	10222.2	The average number of steps per day is $(51111 / 5)$.

Write the complete StepTracker class, including the constructor and any required instance variables and methods. Your implementation must meet all specifications and conform to the example.