

Name:
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Quiz #1

Below, you are given the description of a system that we'd like to simulate. I want you to read this system description carefully and perform sample path decomposition.

Hint: Tell me what the **inputs**, the **logic**, and the **system events** are, but do not generate the possible sample paths.

Description: News vendor Phyllis Pauley sells newspapers at the corner of Kirkwood Avenue and Indiana Street and each day she must determine how many papers to order. Phyllis pays the company 20 cents for each paper and sells the papers for 25 cents each day. Newspapers that are unsold at the end of the day are worthless. Phyllis knows that each day she can sell between 6 and 10 papers, with each possibility being equally likely. You would simulate this system to help Phyllis Pauley determine the number of newspapers to order everyday.

Sample Path Decomposition:

Input: Number of newspapers Pauley orders everyday and number of newspapers Pauley sells everyday.

Logic: Order between 6 and 10 papers at the beginning of each day. Unsold papers are worthless.

System event: Placing a morning order and selling the newspapers.