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| **Run Test: Tutorial** |
| 1. On a commuter train, the conductor want to see whether the passengers entering a train enter in a random manner. He observes the first 25 people, with the following sequence of males (M) and females (F).   FFF  MM   FFFF   M   F   MMM   FFFF   MM   FFF   MM  Test for randomness at α = 0.05   1. Suppose 26 cola drinkers are sampled randomly to determine whether they prefer brand A or brand B. The random sample contains 18 drinkers of brand A and brand B. Suppose the sequence of sampled cola drinkers is   A BBBBB A BB A BBBB A B A BBB AAA BBB  Is this sequence of cola drinker’s evidence that the sample is not random?   1. A machine produces parts that are occasionally flawed. When the machine is working in adjustment, flaws still occur but seem to happen randomly. A quality control person randomly select 50 of the parts produced by the machine today and examines them one at time in the order that they were made. The result is 40 parts with no flaws denoted by N and with flaws denoted by F is shown here:   NNN F NNNNNNN F NN FF NNNNNN F NNNN F NNNNNN FFFF NNNNNNNNNNNN  Is the sequence of flaws and no flaws evidence that the sample is not random? |