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Intro to Programming Mini Lab 2 Stop and Think Questions

1. When there are no lemon squares, student will take a sandwitch, take coffee, see that if there are lemon squares, see that there are not lemon squares, sit down and eat, in that order. When there are lemon squares, student will take a sandwitch, take coffee, see if there are lemon squares, see that there are lemon squares and take one, and sit down and eat in that order.
2. The probability that a student takes an apple is 25%, the probability it takes a lemon square is 25%, and the probability it takes a slice of apple pie is 25%. If the generator has the value of 9, then the student takes a cookie.
3. The student will take a lemon square 40% of the time, an apple 30% of the time, and apple pie 30% of the time. 10% of the time the student does not take desert.
4. Example 2 simulates a student who first checks to see if there are lemon squares, then apples, then apple pie. If none of his favorites are there, he eats a cookie.
5. If the else tags were removed, example 1 would only work for values of – 1 or 2. The student would always take a cookie, because taking away that else tag makes it an independent statement.
6. If example 2 were written without else statements, the program would always give the student apple pie. It may also give the student lemon squares and apples, depending on the generated number.
7. There would be no real way to know how likely the program was to take any of the deserts. It would make a new random number for each conditional statement, the student could take none, one, two, three, or all of the deserts.