**Q:** In your drawer you have 10 pairs of socks, 6 of which are white, and 7 tee shirts, 3 of which are white. If you randomly reach in and pull out a pair of socks and a tee shirt, what is the probability both are white?

**Solution:**

The probability of choosing a white pair of socks is 6/10.

The probability of choosing a white tee shirt is 3/7.

The probability of both being white is 6/10.3/7=9/35

**Python solution:**

# Define the number of white socks and white t-shirts

white\_socks = 6

total\_socks = 10

white\_tshirts = 3

total\_tshirts = 7

# Calculate the probability of selecting a white pair of socks

prob\_white\_socks = white\_socks / total\_socks

# Calculate the probability of selecting a white t-shirt

prob\_white\_tshirt = white\_tshirts / total\_tshirts

# Calculate the probability of selecting both a white pair of socks and a white t-shirt

prob\_both\_white = prob\_white\_socks \* prob\_white\_tshirt

# Print the probability of selecting both a white pair of socks and a white t-shirt

print("The probability of selecting both a white pair of socks and a white t-shirt is: " + str(prob\_both\_white))

**OUTPUT:**

The probability of selecting both a white pair of socks and a white t-shirt is: 0.2571428571428571