**Problem Statement**

Two balls are drawn at random in succession without replacement from an urn

containing 4 red balls and 6 black balls.

Find the probabilities of all the possible outcomes.

**Solution**

All possible probabilities:

RR = 4/10 \* 3/9 = 2/15

RB = 4/10 \* 6/9 = 4/15

BR = 6/10 \* 4/9 = 12/45

BB = 6/10 \* 5/9 = 1/3yy