

## Puzzle 12 | (Maximize probability of White Ball)

There are two empty bowls in a room. You have 50 white balls and 50 black balls. After you place the balls in the bowls, a random ball will be picked from a random bowl. Distribute the balls (all of them) into the bowls to maximize the chance of picking a white ball.

**Answer:**

Put 1 white ball in one bowl and 49 white balls in other bowl.

So probability of getting white ball becomes  $\frac{1}{2} \times 1 + \frac{1}{2} \times \frac{49}{99}$  which is approximately  $\frac{3}{4}$ .

Source: <http://www.geeksforgeeks.org/forums/topic/balls-and-bowls/>