

## Puzzle – 15

### **Q- 9 Balls Weight Puzzle**

There are 9 balls out of which one ball is Lighter in weight and rest are of the same weight. In how many occurrences will you find the Lighter ball?

### **My Approach and Solution –**

Divide the 9 balls into three sets, each containing 3 balls each. Let's name them for easy understanding. A {3 balls}, B {3 balls}, C {3 balls}. Now weigh them against each other to find out the set containing Lighter weight ball.

We can find the set with lightest weight in one occurrence.

In the next occurrence, we can repeat the same process for the balls in the lighter set to find out the lighter ball.

Therefore, it will take 2 occurrences to find out the lighter ball.