# SKILLING-11

# Applications on **Confidence interval**

# 1)You’re about to get on a plane to Seattle. You want to know if you should bring an umbrella. You call 3 random friends of yours who live there and ask each independently if it’s raining. Each of your friends has a 2/3 chance of telling you the truth and a 1/3 chance of messing with you by lying. All 3 friends tell you that “Yes” it is raining. What is the probability that it’s actually raining in Seattle?

# **2)What is the use of a Confidence Interval?**

**3)What are the effects of the width of confidence interval?**

**4)What is the difference between 95% confidence level and 99% confidence level?**

**5)What is the proportion of confidence interval that will not contain the population parameter?**