

Session 8 – Exploratory

Data Analytics

Assignment - 3



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**Introduction**



This assignment will help you to understand the key concepts learnt in this session.

**Objective**



This assignment will test your skills on Variables and Distribution in R.

**Prerequisites**



Not Applicable

**Associated Data Files**



Not Applicable

**Problem Statement**



1. A recent national study showed that approximately 44.7% of college students have used Wikipedia as a source in at least one of their term papers. Let X equal the number of students in a random sample of size n = 31 who have used Wikipedia as a source.

Perform the below functions

1. Find the probability that X is equal to 17

dbinom(17,size = 31,prob = 0.447)

1. Find the probability that X is at most 13

pbinom(13,size = 31,prob = 0.447)

1. Find the probability that X is bigger than 11.

pbinom(11,size = 31,prob = 0.447,lower.tail = F)

1. Find the probability that X is at least 15.

pbinom(14,size = 31,prob = 0.447,lower.tail = F)

1. Find the probability that X is between 16 and 19, inclusive

#it will take continous values from 16 to 19

sum(dbinom(16:19,size = 31,prob = 0.447))

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**Expected Output**



Not Applicable

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