

## Session 18

**Assignment 1 Question** 

# Session 18: Assignment 1

### **Table of Contents**

- 1. Introduction
- 2. Problem Statement
- 3. Output

#### 1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

#### 2. Problem Statement

#### **Problem Statement 1:**

Is gender independent of education level? A random sample of 395 people were surveyed and each person was asked to report the highest education level they obtained. The data that resulted from the survey is summarized in the following table:

	High Sch	ool Bad	chelors	Maste	ers	Ph.d.	Total	
Femalo Male		54 44	46 53	41 57	20 194			
Total	100	98	99	98	395	5		

Question: Are gender and education level dependent at 5% level of significance? In other words, given the data collected above, is there a relationship between the gender of an individual and the level of education that they have obtained?

#### **Problem Statement 2:**

Using the following data, perform a oneway analysis of variance using  $\alpha$ =.05. Write up the results in APA format.

[Group1: 51, 45, 33, 45, 67] [Group2: 23, 43, 23, 43, 45] [Group3: 56, 76, 74, 87, 56]

#### **Problem Statement 3:**

Calculate F Test for given 10, 20, 30, 40, 50 and 5,10,15, 20, 25.

For 10, 20, 30, 40, 50:

Note: Solution submitted via github must contain all the detailed steps.

### 3. Output

N/A