Testing of Hypothesis
TH 101-Peer Comparison case study

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Business Problem

- This is a peer comparison project. Suppose that you are working for Samsunge in customer experience management team. The idea is to regularly monitor the customer satisfaction levels and peer company moves. The competitor company is Appleo. The objective is to test two main hypothesis.

  1. The Samsunge Average customer satisfaction score is minimum 75%.
  2. The overall average satisfaction score of Samsunge is same as Appleo. There is no significant difference in the satisfaction scores

- It might be possible that both hypothesis are correct, one of them is correct or both of them are wrong. Perform the relevant testing to verify these assumptions

The Data

- The data is collected for 100 Samsunge customers and 100 Appleo customers. Their satisfaction scores are recorded. The sample represent the data and it is unbiased
- Please download the data from below link
  - https://drive.google.com/file/d/0B7Zo00OSj1W6NDN0bzFBa1dmdDg/view?usp=sharing

Sr No	S_Cust_id	Samsunge_Score	Appleo_Cust_id	Appleo_Score
1	S336499	94	A336525	82
2	S73004	99	A73011	83
3	S79537	74	A79538	88
4	S769168	74	A769222	80
5	S609791	83	A609801	74
6	S394037	87	A394057	82
7	S514183	89	A514215	88
8	S433504	83	A433564	92

Approach

- Download the data and import it to SAS
- Part-1
  - Take Samsunge_Score Coolum
  - Identify the right test(Testing sample mean)
  - Accept or reject the null hypothesis based on P-value
- Part-2
  - Calculate the mean of Samsunge and Appleo
  - Perform mean comparison test / two sample equal mean tes
  - Accept or reject null hypothesis based on P-Value

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References

- **References:**
  - Chapter -8 Testing of Hypothesis from the book Practical Business Analytics Using SAS: A Hands-on Guide http://www.amazon.com/Practical-Business-Analytics-Using-Hands/dp/1484200446
  - SAS code from Chapter-8 of the book Practical Business Analytics Using SAS: A Hands-on Guide http://www.amazon.com/Practical-Business-Analytics-Using-Hands/dp/1484200446
  - Case study id: **TH 101-Peer Comparison**

- **Discussion forum**
  - Facebook:
    - https://www.facebook.com/pages/Practical-Business-Analytics-Using-SAS-A-Hands-on-Guide/1539167863021194
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