Week 12 Assessment

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1. Note: This assessment is to be done in R Software only. Please don’t use any other software. We recommend that you use R software to do the assignment.

Question number 1, 2, 3, 4 and 5 are all based on the attached dataset "SavingsDataR.csv", which gives data on personal disposable income ($I$) and gross domestic savings ($S$), in crores of rupees, for India for period 1974-75 to 1995-96.

What is the estimated Keynesian savings function for India during the time period 1974-75 to 1995-96?

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### Part 1: Classical Linear Regression

**Question 1:**

Find the estimated value of $\beta_1$.

**Question 2:**

Find the estimated value of $\beta_2$.

**Question 3:**

Find the estimated value of $\beta_3$.

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### Part 2: Bootstrap Regression

**Question 4:**

Test for homoscedasticity using the `shapiro.test` function. What is the value of $BP$? Is the homoscedasticity assumption valid?

**Question 5:**

Find the estimated value of the real GDP for year 2000.

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### Part 3: Additional Questions

Find the estimated value of the real GDP for year 2000. What is the value of the DW statistic? What do you conclude from the test?