✓ **Congratulations! You passed!**
TO PASS 80% or higher

Keep Learning

GRADE
100%

Week 3 Python Assessment

LATEST SUBMISSION GRADE
100%

1. What is clustered data? — 1 / 1 point

   ○ Clustered data is when there are observations that are the exact same in a dataset.

   ○ Data is considered clustered when our dataset features have a low variance.

   ○ Clustered data is when one group in a dataset is over-represented.

   ⦿ Data is considered clustered when observations are correlated within groups, sometimes related to study designs.

   ✓ Correct

2. Which of the following features has the highest correlation between two observations in the same cluster? — 1 / 1 point

   ○ BPXSY1

   ⦿ SDMVSTRA

   ○ RIDAGEYR

   ○ BMXBMI

   ○ smq

   ✓ Correct

3. What is true about multiple linear regression and marginal linear models when dependence is present in data? — 1 / 1 point

   ○ The standard error in multiple linear regression and marginal linear models tends to be the same.

   ○ A multiple linear regression model is theoretically justified when there is dependence in the data.

   ⦿ Marginal linear model estimates and standard errors are meaningful due to the dependence of data, but only when dependence is strictly between observations within the same group.

   ○ The standard error in multiple linear regression tends to be higher than in marginal linear models.

   ✓ Correct

4. Multilevel models are expressed in terms of _____. — 1 / 1 point

   ○ Mixed effects

   ○ Correlation coefficients

   ⦿ Random effects

   ○ Fixed effects

   ✓ Correct

5. Which of the following is NOT true regarding reasons why we fit marginal models? — 1 / 1 point

   ○ Quicker computational times; faster estimation

   ○ Robust standard errors that reflect the specified correlation structure

   ○ Easier accommodation of non-normal outcomes

   ⦿ All the above are true

   ✓ Correct