

Unit 2 Quiz C

Randomly select 3 questions to ask members of the group requesting the next set of assignments. If they get all questions correct, give them the entire stack of quizzes and assignments so that they can quiz the next group. If they get any question wrong, send them back to their seats to review and then try again in 10 minutes or more.

1. What does `map()` do in R?

Answer: `map()` applies a function to each element of a list or vector and returns a list.

2. How is `map()` different from `map_dbl()` and `map_chr()`?

Answer: `map()` returns a list; `map_dbl` returns a numeric vector; `map_chr` returns a character vector.

3. How do you define a function using a formula in `map()`?

Answer: start the formula with `~` and refer to `.x` directly.

4. Define model selection using forward selection.

Answer: Forward selection starts with an empty model and adds predictors one by one based on the improvement of an evaluation metric such as adjusted R-squared.

5. How do you calculate test error in predictive modeling?

Answer: The test error is given by: $(y_{test} - \hat{y}_{test})^2$ where y_{test} is the dependent variable in the test data set and \hat{y}_{test} is the predicted value.

6. Fill in the blank: A coefficient in a multiple regression model represents the expected change in the dependent variable Y for a one-unit increase in an explanatory variable, holding _____.

Answer: all other explanatory variables constant.