

**Knowledge Check** 

### What is the difference between sequential and parallel ensemble techniques?

- A. In sequential ensemble, base learners are generated in parallel, and in parallel ensemble, learners are generated consecutively.
- B. The sequential technique is applied when the base learners are generated in parallel, and the parallel is applied when the learners are generated consecutively.
- C. The sequential technique uses dependence between the base learners to reduce error, whereas the parallel technique uses independence between the base learners to reduce error.
- D. There is no difference between sequential and parallel ensemble techniques.



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#### The correct answer is **C**

Sequential technique uses dependence between the base learners to reduce error, whereas the parallel technique uses independence between the base learners to reduce errors.

# What is the purpose of averaging and voting techniques?

- A. To reduce errors in the model
- B. To reduce the variance in the model
- C. To increase the bias in the model
- D. To increase the variance in the model



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- A. To reduce errors in the model
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The correct answer is A

Averaging and voting techniques are used to reduce errors in the model.

# Which of the following ensemble learning techniques involves combining predictions from multiple base models to make a final prediction?

- A. Bagging
- B. Max voting
- C. AdaBoost
- D. Blending ensemble



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#### The correct answer is **D**

Blending ensemble combines predictions using weighted averaging, allowing diverse model contributions for more robust predictions.

