CS381 Data Analytic Regression Practice Quizz

Question 1: Which of the following statements related to Linear and Logistic regression are true?

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        1. To fit a model, we try to find what are the regression coefficient by
    maximizing the corresponding cost function.
        2. The mean square error function can be used as the cost function for
    Linear regression.
        3. Odd is the probability that a certain event happens
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  A. Only 1
  B. Ony 2
  C. 1 and 2
  D. 2 and 3
  E. All of the above

Answer: B (1 is wrong because we want to minimize the cost function, 3 is wrong because Odd is the ratio of the positive probability over negative probability

Question 2: Which of the following statements related to Linear and Logistic regression are true?

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        1. Gradient descent is a method for solving optimization problems.
        2. Gradient descent will always find the global minimum.
        3. To fit a logistic model, one can use gradient descent method to find
    the best fitted parameters
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  A. Only 1
  B. Only 2
  C. 1 and 2
  D. 1 and 3
  E. All of the above

Answer: D (2 is wrong because Gradient descent may find only local minium)

Question 3: Fill in the blank

The range of a Sigmoid function is between _____ and _____.

Sigmoid function range is between 0 to 1 because it is used for probability which can only between 0 and 1