

## CSE556: NLPQuiz - 4

**Duration:** 10 mins

**Total marks:** 10

1. Named Entity Recognition can not be modelled as a
  - a. Sequence labelling problem
  - b. Sequence transformer problem
  - c. It can be modelled as either a or b.**
  - d. I don't know
  
2. Identify Name, Location or Organization in the following sentence and annotate them with BIO encoding. Note: For simplicity, omit all punctuation marks.

Sachin, Sourav and Rahul Dravid scored centuries in the first test.

**Sachin\_B Sourav\_B and\_O Rahul\_B Dravid\_I scored\_O centuries\_O in\_O the\_O first\_O test\_O**

3. What was the most fundamental objective of the "Attention is all you need" paper?
  - a. To achieve better performance
  - b. To compute self attention
  - c. To achieve parallelization in computation**
  - d. To avoid vanishing gradient problem
  - e. To avoid exploding gradient problem
  - f. All of the above (a, b, c, d, & e)
  - g. None of the above (a, b, c, d, & e)
  
4. Earley, CYK and Malt parser are for:
  - a. Constituency-TOP-DOWN, Constituency-BOTTOM-UP, Dependency-TOP-DOWN
  - b. Constituency-TOP-DOWN, Constituency-BOTTOM-UP, Dependency-BOTTOM-UP**
  - c. Dependency-TOP-DOWN, Constituency-TOP-DOWN, Constituency-BOTTOM-UP
  - d. Constituency-TOP-DOWN, Dependency-TOP-DOWN, Constituency-BOTTOM-UP
  - e. Dependency-BOTTOM-UP, Constituency-BOTTOM-UP, Constituency-TOP-DOWN
  - f. Constituency-BOTTOM-UP, Dependency-BOTTOM-UP, Constituency-TOP-DOWN
  
5. Let the vocabulary size for the source and target languages are  $V_1$  and  $V_2$ , respectively. Moreover, consider you have sentences with max-length 10 at the source side and max-length 20 at the target side. In a naive encoder-decoder paradigm, what would the dimension of each output be at the decoder side?

**Ans:  $V_2$  - one neuron for each word in the vocabulary**