

Unit 9 - Week 8

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Assignment 8

The due date for submitting this assignment has passed. **Due on 2019-09-25, 23:59 IST.**
 As per our records you have not submitted this assignment.

1) What are the different types of translations discussed in the Vauquois diagram? 1 point

- Word for word translation
- Syntax-tree based translation
- Semantics based translation
- Phrase-based translation

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 Word for word translation
 Syntax-tree based translation
 Semantics based translation

2) Check all that is true about Interlingua 1 point

- Increases computational complexity
- Difficult to design such a representation
- meta-language representing knowledge about a source language
- It is a bridge language

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 Difficult to design such a representation
 meta-language representing knowledge about a source language
 It is a bridge language

3) The statement "The argmax function finds the most likely English sentence e given the Spanish sentence s and maximizes the probability $P(s|e)$ " is 1 point

- False
- True

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 False

4) Bayes rule for translation is $P(e|f) = \frac{P(e|f)P(e)}{P(f)}$ 1 point

- True
- False

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 False

For questions 6-10, consider the translation which maximizes the probability $P(TL|SL)$, where TL is the target language and SL is the source Language 1 point

5) The index of the alignment variable refers to 1 point

- The location of the word in the source language
- The location of the word in the target language
- The value of the source language
- None of the above

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 The location of the word in the source language

6) The value of the alignment variable refers to the location of the word in the target language 1 point

- True
- False

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 True

7) Consider the alignments $a = \{1, 3, 3, 4, 7\}$. How many words are there in the source and the target languages ($\{\#ofSLwords, \#ofTLwords\}$)? 1 point

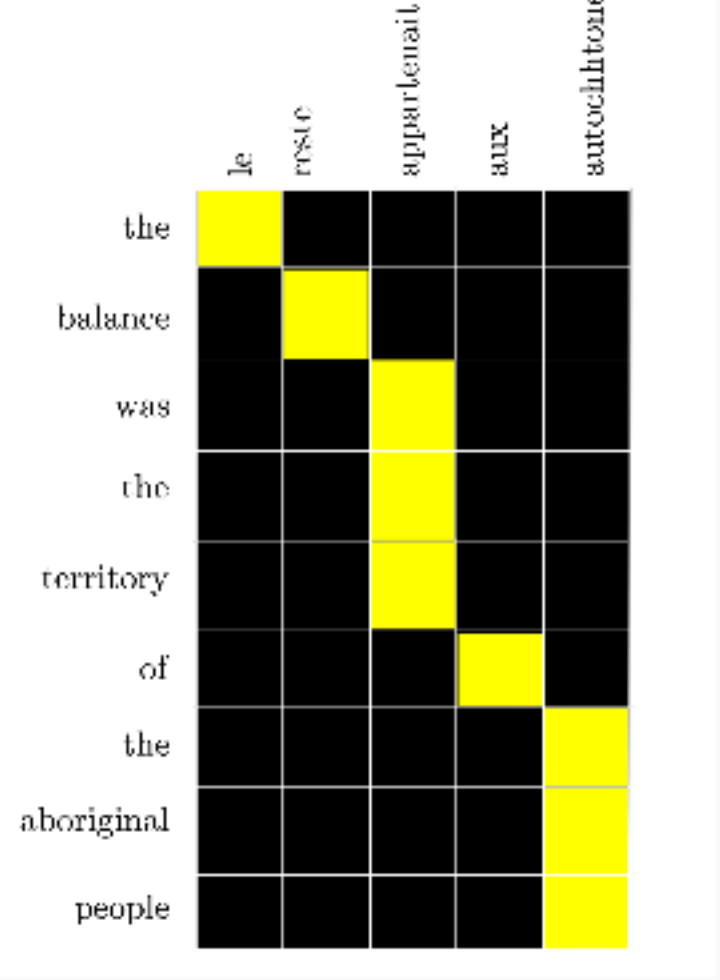
Note: * in the options refers to any number ≥ 7

- {*, 7}
- {5, *}
- {7, *}
- {*, 5}

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 {5, *}

8) The alignment variables for the source language using the following figure is {1, 2, 3, 3, 3, 4, 4, 5, 5} 1 point



- True
- False

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 False

9) Find the alignment variables using the the following alignment diagram: 1 point



- {1, 2, 4, 5, 6, 7, 7}
- {1, 3, 3, 5, 6, 7, 8}
- {1, 1, 4, 5, 6, 7, 8}
- {1, 2, 4, 5, 6, 7, 8}
- None of the above

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 None of the above

10) Find the alignment variables for the source language using the following alignment diagram 1 point



- {1, 2, 2, 3, 4, 5, 6, 7}
- {1, 1, 2, 3, 4, 5, 6, 7}
- {1, 1, 3, 2, 4, 5, 6, 7}
- {1, 2, 3, 4, 5, 6, 7, 8}
- None of the above

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 {1, 1, 3, 2, 4, 5, 6, 7}

11) IBM Model 1 is 1 point

- Alignment decisions are based on the context words
- Word2Word translation
- Lexical translation
- The length of the target language sentence is fixed

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 Word2Word translation
 Lexical translation

12) It is possible to have NULL alignment in IBM Model 1 1 point

- True
- False

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 True

13) The total number of possible alignments is given by $\left(\frac{1}{n+1}\right)^m$, where m and n are the number of words in the source and the target language, respectively 1 point

- True
- False

No, the answer is incorrect.
 Score: 0

Accepted Answers:
 False