

## NPFL006 Introduction to Formal Linguistics – homework 4

- assigned December 2, 2021, **due December 16, 2021**
- please send your answers to `sevcikova@ufal.mff.cuni.cz`
- max. 8 points in total (4 points for information on each of the two frameworks studied)

Please read the following two papers:

- Abend, Omri and Ari Rappoport. 2013. Universal Conceptual Cognitive Annotation (UCCA). In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (ACL 2013)*, pages 228–238.  
<https://aclanthology.org/P13-1023.pdf>
- Banarescu, Laura, Claire Bonial, Shu Cai, Madalina Georgescu, Kira Griffitt, Ulf Hermjakob, Kevin Knight, Philipp Koehn, Martha Palmer, and Nathan Schneider. 2013. Abstract Meaning Representation for Sembanking. In *Proceedings of the 7th Linguistic Annotation Workshop and Interoperability with Discourse*, pages 178–186.  
<https://aclanthology.org/W13-2322.pdf>

Based on the papers, provide the following four pieces of information for each of the two frameworks:

1. what type of graphs is used to represent the meaning of sentences?
2. what do nodes and edges of the graph represent / what do they correspond to?
3. what labels are used on nodes?
4. what labels are used on edges?