

## Assignment Nr. 13

(Deadline 16.02.2020)

### Task 4

The number of reads the two systems agree on is presented in the following table:

total number of reads	agreement regarding the rank of...		
	phylum	order	genus
32	30	25	21
500	479	215	233

The fact that there seem to be more reads agreed upon regarding the rank of genus than order is probably due to the fact that the systems sometimes use synonyms, which is not always detectable by our script and thus is sometimes counted as no agreement.

A complete overview over the classifications can be generated with the `comparison.py` file. An example for the `reads16S-32.fasta` file regarding the rank of *Phylum* is given with the following table. Note that some synonyms can be detected, for example with read R2:

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read	RDP_class	Silva_class	agreement
R1	Proteobacteria	Proteobacteria	True
R2	Actinobacteria	Actinobacteriota	True
R3	Firmicutes	Firmicutes	True
R4	Bacteroidetes	Bacteroidota	True
R5	Bacteroidetes	Bacteroidota	True
R6	Bacteroidetes	Bacteroidota	True
R7	Bacteroidetes	Bacteroidota	True
R8	Bacteroidetes	Bacteroidota	True
R9	Firmicutes	Firmicutes	True
R10	Firmicutes	Firmicutes	True
R11	Firmicutes	Firmicutes	True
R12	Deinococcus-Thermus	Deinococcota	False
R13	Firmicutes	Firmicutes	True
R14	Firmicutes	Firmicutes	True
R15	Proteobacteria	Proteobacteria	True
R16	Campilobacterota	Campylobacterota	False
R17	Firmicutes	Firmicutes	True
R18	Firmicutes	Firmicutes	True
R19	Proteobacteria	Proteobacteria	True
R20	Actinobacteria	Actinobacteriota	True
R21	Proteobacteria	Proteobacteria	True
R22	Proteobacteria	Proteobacteria	True
R23	Bacteroidetes	Bacteroidota	True
R24	Proteobacteria	Proteobacteria	True
R25	Firmicutes	Firmicutes	True
R26	Firmicutes	Firmicutes	True
R27	Firmicutes	Firmicutes	True
R28	Firmicutes	Firmicutes	True
R29	Firmicutes	Firmicutes	True
R30	Firmicutes	Firmicutes	True
R31	Firmicutes	Firmicutes	True
R32	Firmicutes	Firmicutes	True