SoSe 2022

Introduction to Formal Semantics

Dr. Volha Petukhova & Nicolaie Dominik Dascalu

Exercise sheet n.5

Total points -/20

Note. Are there questions you would like to discuss during the tutorial? If yes, please send them to me (n.dascalu@lsv.uni-saarland.de) so that we can go through them together.
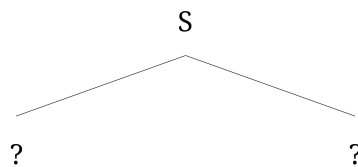
Exercise 1   (-/5)

Represent the sentences as GENERALISED QUANTIFIERS.

(1) Some of the cats play the piano.
(2) 10 tables have been reserved.
(3) Most warlocks are evil.
(4) I pay you not more than 5 dollars.
(5) Sadly, none of the students tipped the waitress.

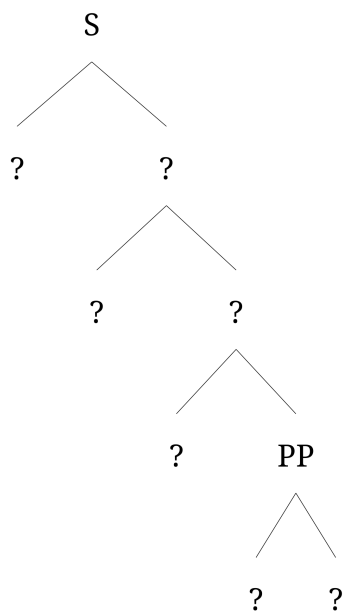**Exercise 2   (-/15)**

For each sentence provide its (a) tree representation, (b) type, and (c) lambda-abstractions.

(1) Quicksilver runs fast.

```
              S
           /     \
          ?       ?
```

(2) Sissi is married to Franz.

```
                        S
                   ┌────┴────┐
                   ?         ?
                        ┌────┴────┐
                        ?         ?
                             ┌────┴────┐
                             ?         PP
                                  ┌────┴────┐
                                  ?         ?
```

(3) Tom and Jerry aren't friends.

```
                    S
          ┌─────────┴─────────┐
          ?                    ?
     ┌────┴────┐
     ?       CoordIP
          ┌─────┴─────┐
   Coord : ⟨e,⟨e,e⟩⟩    ?
   λy.λz.(SumOf(z,y))
          │
         and
```