

# Exercise-Sheet C

Lie  $p$ -rings

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**Exercise 1:** Take the `LiePRing(5)[10]` and exhibit its presentation.

**Exercise 2:** How many  $p$ -groups of order  $p^7$  are there for  $p \leq 100$ ?

**Exercise 3:** Determine the  $p$ -groups of order  $p^4$  for  $p = 101$ .  
(Tipp: Use `PGroupByLiePRing`)