```
pq_node
# pert_children
# pert leaves
# is endmost
# father
# mark
# sons
# pos
# Ipos
# n
# id
# up
# up id
# pq node()
#~pq node()
# kind()
# partial()
# full()
# write()
# clear()
# P()
# Q()
# D()
# L()
    pq_leaf
  - other id
  - e
  + pq leaf()
  kind()

    write()

  - P()
  - Q()
  - D()
  L()
```