```
GQCP::BaseOrbitalOptimizer
  # is_converged
  # convergence threshold
  # maximum_number_of_iterations
# number_of_iterations
  + BaseOrbitalOptimizer()
  + ~BaseOrbitalOptimizer()
  + calculateNewRotationMatrix()
  + checkForConvergence()
  + prepareConvergenceChecking()
  + numberOfIterations()
  + optimize()
    GQCP::NewtonOrbitalOptimizer
# hessian_modifier
# gradient
# ȟessian
+ NewtonOrbitalOptimizer()
+ ~NewtonOrbitalOptimizer()
+ calculateGradientMatrix()
+ calculateHessianTensor()
+ calculateNewFullOrbitalGenerators()
+ prepareOrbitalDerivatives
Calculation()
+ calculateNewRotationMatrix()
+ checkForConvergence()
+ prepareConvergenceChecking()
+ calculateGradientVector()
+ calculateHessianMatrix()
+ calculateNewFreeOrbitalGenerators()
+ directionFromIndefiniteHessian()
+ newtonStepIsWellDefined()
                   Δ
GQCP::QCMethodNewtonOrbital
               Optimizer
# D
# d
+ ~QCMethodNewtonOrbitalOptimizer()
+ calculate1DM()
+ calculate2DM()
+ prepareDMCalculation()
+ calculateGradientMatrix()
+ calculateHessianTensor()
+ prepareOrbitalDerivatives Calculation()
+ oneDM()
+ twoDM()
+ NewtonOrbitalOptimizer()
                   Δ
GQCP::AP1roGLagrangianNewton
           OrbitalOptimizer
+ AP1roGLagrangianNewtonOrbital
Optimizer()

    + AP1roGLagrangianNewtonOrbital

Optimizer()
+ prepareDMCalculation()
+ calculate1DM()
+ calculate2DM()
+ calculateNewFullOrbitalGenerators()
 + electronicEnergy()
+ geminalCoefficients()
+ multipliers()
```