```
QMatrix
   + get_Q()
   + get QD()
   + swap index()
    + ~QMatrix()
        Kernel
# kernel function
- X
- x square
- kernel type
- degree
- gamma
- coef0
+ Kernel()
+ ~Kernel()
+ get Q()
+ get QD()
+ swap index()
+ k function()
- kernel linear()
- kernel poly()
- kernel rbf()
- kernel_sigmoid()
kernel precomputed()

    dot()

   ONE CLASS Q
- cache
- QD
+ ONE CLASS Q()
+ get Q()
+ get_QD()
+ swap_index()
+ ~ONE CLASS Q()
```