```
NumericalIntegrationBase
    #float interval begin;
     #float interval end:
         #int slicing;
          #double()
 +NumericalIntegrationBase()
+~NumericalIntegrationBase()
         +Integrate()
       +interval begin()
        +interval end()
           +slicing()
         +step size()
          +function()
       NewtonCotes
-NewtonCotesIntegrationType
      integration_type_;
    -MidPointIntegration()
    -TrapezoidIntegration()
    -SimpsonIntegration()
       -MidPointError()
       -TrapezoidError()
       -SimpsonError()
       +NewtonCotes()
      +~NewtonCotes()
         +Integrate()
    +ErrorWithDerivative()
      +integration_type()
    +set integration type()
   AdaptiveQuadrature
       -float threshold:
   -IntegrateWithInterval()
    +AdaptiveQuadrature()
   +~AdaptiveQuadrature()
         +Integrate()
         +threshold()
       +set_threshold()
```