```
clear all;format long;format compact;
mybetween(2,6,20)
        ans =
           2.8000000000000000
mybetween(-6,-3,12)
        ans =
          -5.6400000000000000
mybetween(7,7,2)
        ans =
mybetween(6,-2,85)
        ans =
           4.8000000000000000
mynewton(@(x)x^2-2,10,3)
        ans =
           1.737194874379598
mynewton(@(x)x^2-2,10,10)
        ans =
           1.414213562373095
mynewton(@(x)7*x-exp(x),20,3)
        ans =
          17.000002792451742
mynewton(@(x)7*x-exp(x),20,10)
        ans =
          10.001956154629937
mylhopital(@(x)sin(x),@(x)x,0)
        ans =
             1
mylhopital(@(x)2-2*cos(3*x),@(x)x^2,0)
        ans =
             9
mylhopital(@(x)exp(x-1)-1,@(x)(5*x-1),1)
        ans =
             0
```

