```
fun = @(x)(1 - x(1))^2 + (100*(x(2)+1-x(1)^2)^2);

options = optimset('OutputFcn', @bananaout, 'Display', 'off');

x0 = [0,0];

[x,fval,eflag,output] = fminsearch(fun,x0,options);
```

