```
function y=g(x, y)
   y=-1.2*y+7*exp(-0.3*x)
endfunction

function [x, y]=euler (a, b, y0, h)
   x=a:h:b
   n=length(x)
   y(1)=y0
   for i=1:n-1
      y(i+1)=y(i)+g(x(i),y(i))*h
   end
endfunction

heun
      k1=g(x(i),y(i))
      k2=g(x(i)+h,y(i)+k1*h)
      k=(k1+k2)/2
      y(i+1)=y(i)+k*h

ptm
      k1=g(x(i),y(i))
      k2=g(x(i)+h/2,y(i)+k1*h/2)
      k=k2
      y(i+1)=y(i)+k*h

rk4
      k1=g(x(i),y(i))
      k2=g(x(i)+h/2,y(i)+k1*h/2)
      k3=g(x(i)+h/2,y(i)+k2*h/2)
      k4=g(x(i)+h,y(i)+k3*h)
      k=(k1+2*k2+2*k3+k4)/6
      y(i+1)=y(i)+k*h
```