```
clc; clear all;

x=input('\n Entrer la valeur initial y0 = '); % insérer yo comme vecteur [2,5]

r=input('\n Entrer la valeur initial r = ');

k=0;

epsilon=1;

while (epsilon > 10^-100)

   k=k+1;

r=r-0.4;

x=x-r*grd(x);

gd=grd(x);

epsilon=norm(gd);                % epsilon=norm(x-y);       %ou bien la condition suffisante

end

min=x

iter=k
```

```
function f=grd(x)

f(1)=2*x(1);

f(2)= 2*x(2);

end
```