```fortran
 1: program aula20do02edo
 2: open(14,file="euler.txt")
 3: open(15,file="erro.txt")
 4: H = 0.001
 5: NSTEP = 3./H
 6: y = 1.
 7: DO IX = 0, NSTEP-1
 8:     X = IX*H
 9:     Y = Y + H*func(X,Y)
10:     DIFF = EXATA(X+H)-Y
11:     erro = abs(DIFF/EXATA(X+H))
12:     write(14,*)X+H,Y,EXATA(X+H)
13:     WRITE(15,*)erro
14: enddo
15: end
16:
17: real function func(X,Y)
18:     func = -x*y
19: end
20:
21: real function exata(x)
22:     exata = EXP(-0.5*(X)**2)
23: end
```