

```
1  import math
2  from cmath import exp, log10
3
4  def factorial(x):
5      return math.factorial(x)
6
7  def pow(x,y):
8      return math.pow(x,y)
9
10 def somatorio(a,c):
11     soma = 0
12     for k in range(c):
13         soma = soma + (pow(a,k)/factorial(k))
14     return soma
15
16 a = float(input("A(Erlangs) = "))
17 c = int(input("C(canais) = "))
18 h = float(input("H(hold time) = "))
19 t = float(input("t(time) = "))
20
21 pr0 = pow(a,c) / (pow(a,c) + (factorial(c)*(1-(a/c))*somatorio(a,c)))
22
23 prt = pr0*exp(( -(c-a)) * t) / h)
24
25 print("Pr[atraso > 0] = " + str(pr0))
26 print("Pr[atraso > " + str(t) + "] = " + str(prt))
```