#采用复化梯形公式计算数值积分

import numpy as np

a = 0 # 积分下限

b = np.pi # 积分上限

n = 6 # 积分点个数

f = lambda x np.sin(x) #y=f(x)自定义

h = (b-a)n

x = np.arange(a+h, b, h)

y = f(x)

r = h2(2sum(y)+f(a)+f(b))

print('---------------------------------------------------------n')

print('I=','{.5f}'.format(r))