

```
import math

# 設定 x = 1, 展開前五項 (從 n=0 到 n=4)
x = 1
n_terms = 5

taylor_sum = 0

for n in range(n_terms):
    term = (x ** n) / math.factorial(n)
    taylor_sum += term

print(f"\nApproximation of e^{x} using {n_terms} terms: {taylor_sum}")
```

11227130_資訊二甲_11227130_彭妍嘉 3_25 ×

:

/usr/local/bin/python3.12 /Users/pengyenjia/Desktop/運算思維與程式設計/makeUp_Submission_py/3_25/回家作業/11227130_資訊二甲_11227130_彭妍嘉 3_25.py

Approximation of e^1 using 5 terms: 2.708333333333333

Process finished with exit code 0