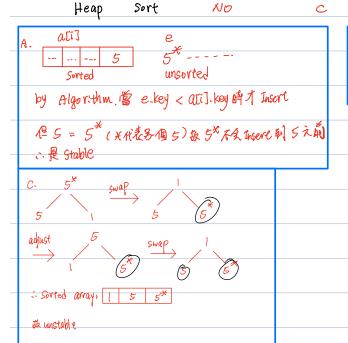
## 展開傷:

 $\frac{\omega}{\sum_{i=0}^{\infty} x^{i}} = \frac{1}{1-x}$ 2 边 微分傳:  $\sum_{i=1}^{\infty} i x^{i-1} = \frac{1}{(1-x)^{2}}$ 2 边同录 x 傳:  $\sum_{i=1}^{\infty} i x^{i} = \frac{x}{(1-x)^{2}}$   $\sum_{i=0}^{\infty} i x^{i} = \frac{x}{(1-x)^{2}}$   $\sum_{i=0}^{\infty} i x^{i} = \frac{x}{(1-x)^{2}}$ 

1. Stable? Example!

Insertion sort Yes A

Quick Sort No B



B. ali]: 
$$3 5 5^* 1 \longrightarrow 3 1 5^* 5$$

Pk i j Pk i j

unstable