

資料結構 Bonus 4

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運管 15

執行後截圖畫面：

一、插入 A 和 B

The screenshot shows a Windows application window titled 'Form1'. On the left, there are several controls: a 'new term in poly A' button, input fields for 'coefficient: 4' and 'exponent: 5', a highlighted 'new term in poly B' button, a 'Random setting' section with 'max exponent:', 'max range:(+/-)', and 'generate n times:' fields, a 'random polys A and B' button, a 'C = A + B' button, and a 'clear' button. On the right, there is a 'Polynomial' tab with a text area containing 'A: 4x^5' and 'B: 4x^5'.

二、隨機產生 A 和 B

generate n times 是指要產生多少次的亂數，並插入 A 或 B

The screenshot shows the same 'Form1' application window. The 'random polys A and B' button is now highlighted. The text area displays more complex polynomial expressions: 'A: 4x^5', 'B: 4x^5', 'A: 7x^2+2x^4+4x^5+(-4)x^7+8x^8+3x^9+(-9)x^10', and 'B: (-4)x^1+(-10)x^2+(-9)x^3+9x^4+13x^5+(-2)x^6+(-5)x^9'.

三、 $C=A+B$

Form1

new term in poly A

coefficient: 4

exponent: 5

new term in poly B

Random setting

max exponent: 10

max range:(+/-) 10

generate n times: 10

random polys A and B

$C = A + B$

clear

Polynomial Addition

A: $7x^2+2x^4+4x^5+(-4)x^7+8x^8+3x^9+(-9)x^{10}$
B: $(-4)x^1+(-10)x^2+(-9)x^3+9x^4+13x^5+(-2)x^6+(-5)x^9$
C: $(-4)x^1+(-3)x^2+(-9)x^3+11x^4+17x^5+(-2)x^6+(-4)x^7+8x^8+(-2)x^9+(-9)x^{10}$

四、Clear

這裡示範將全部清除掉後，再加入 A

Form1

new term in poly A

coefficient: 4

exponent: 5

new term in poly B

Random setting

max exponent: 10

max range:(+/-) 10

generate n times: 10

random polys A and B

$C = A + B$

clear

Polynomial Addition

A: $4x^5$
B: $4x^5$
A: $7x^2+2x^4+4x^5+(-4)x^7+8x^8+3x^9+(-9)x^{10}$
B: $(-4)x^1+(-10)x^2+(-9)x^3+9x^4+13x^5+(-2)x^6+(-5)x^9$
Clear successfully!
A: $4x^5$