

Case 1

Input functions:

$$2x^2+6x+5 \text{ and } 3x^2-2x-1$$

Outputs:

$$\text{Addition: } 5x^2+4x+4$$

$$\text{Multiplication: } 6x^4+14x^3+x^2-16x-5$$

```
Select "C:\Users\yoshan\Desktop\DSA linked list\19001614.Code.exe"
*****Details about first polynomial*****

How many terms in the first polynomial? :3
Please enter coefficients and exponents:
Enter coefficient:2
Enter exponent:2
Enter coefficient:6
Enter exponent:1
Enter coefficient:5
Enter exponent:0
*****Details about second polynomial*****

How many terms in the second polynomial? :3
Please enter coefficients and exponents:
Enter coefficient:3
Enter exponent:2
Enter coefficient:-2
Enter exponent:1
Enter coefficient:-1
Enter exponent:0
.....after addition.....
coefficient is: 5
exponent is: 2
coefficient is: 4
exponent is: 1
coefficient is: 4
exponent is: 0
.....after multiplication.....
coefficient is: 6
exponent is: 4
coefficient is: 14
exponent is: 3
coefficient is: 1
exponent is: 2
coefficient is: -16
exponent is: 1
coefficient is: -5
exponent is: 0

Process returned 0 (0x0)   execution time : 63.077 s
Press any key to continue.
```

Case 2

Input functions:

$$X^3+2 \text{ and } x^3-4x^2+5x-1$$

Outputs:

$$\text{Addition: } 2x^3+1-4x^2+5x$$

$$\text{Multiplication: } x^6-4x^5+5x^4+x^3-8x^2+10x-2$$

```
"C:\Users\yoshan\Desktop\DSA linked list\19001614_Code.exe"
*****Details about first polynomial*****
How many terms in the first polynomial? :2
Please enter coefficients and exponents:
Enter coefficient:1
Enter exponent:3
Enter coefficient:2
Enter exponent:0
*****Details about second polynomial*****
How many terms in the second polynomial? :4
Please enter coefficients and exponents:
Enter coefficient:1
Enter exponent:3
Enter coefficient:-4
Enter exponent:2
Enter coefficient:5
Enter exponent:1
Enter coefficient:-1
Enter exponent:0
.....after addition.....
coefficient is: 2
exponent is: 3
coefficient is: 1
exponent is: 0
coefficient is: -4
exponent is: 2
coefficient is: 5
exponent is: 1
.....after multiplication.....
coefficient is: 1
exponent is: 6
coefficient is: -4
exponent is: 5
coefficient is: 5
exponent is: 4
coefficient is: 1
exponent is: 3
coefficient is: -8
exponent is: 2
coefficient is: 10
exponent is: 1
coefficient is: -2
exponent is: 0
Process returned 0 (0x0)   execution time : 32.508 s
Press any key to continue.
```

Case 3

Input functions:

$2x+1$ and x^2-5

Outputs:

Addition:

$2x-4+x^2$

Multiplication:

$2x^3-10x+x^2-5$

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"C:\Users\roshan\Desktop\DSA linked list\19001614_Code.exe"
*****Details about first polynomial*****

How many terms in the first polynomial? :2
Please enter coefficients and exponents:
Enter coefficient:2
Enter exponent:1
Enter coefficient:1
Enter exponent:0
*****Details about second polynomial*****

How many terms in the second polynomial? :2
Please enter coefficients and exponents:
Enter coefficient:1
Enter exponent:2
Enter coefficient:-5
Enter exponent:0
.....after addition.....
coefficient is: 2
exponent is: 1
coefficient is: -4
exponent is: 0
coefficient is: 1
exponent is: 2
.....after multiplication.....
coefficient is: 2
exponent is: 3
coefficient is: -10
exponent is: 1
coefficient is: 1
exponent is: 2
coefficient is: -5
exponent is: 0

Process returned 0 (0x0)   execution time : 25.912 s
Press any key to continue.
```