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Interpolation Polynomial with C++

Contoh Input/Output
Format input:

```
n-1
x1 y1
x2 y2
...
xn-1 yn-1
xn yn
```

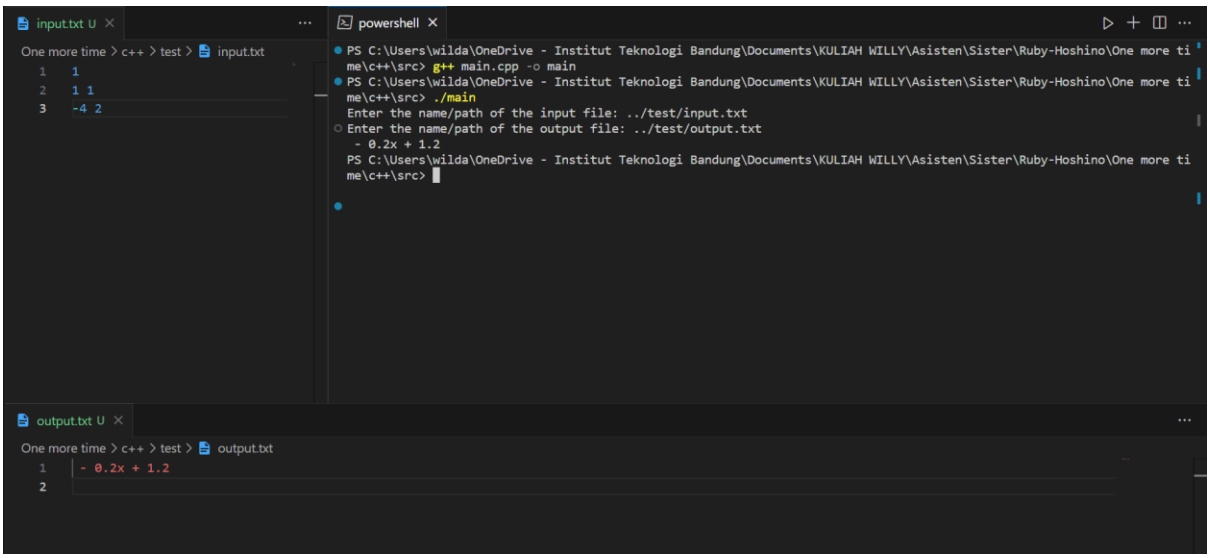
Format output:

```
ax^n + bx^n-1 + ... + px + q
```

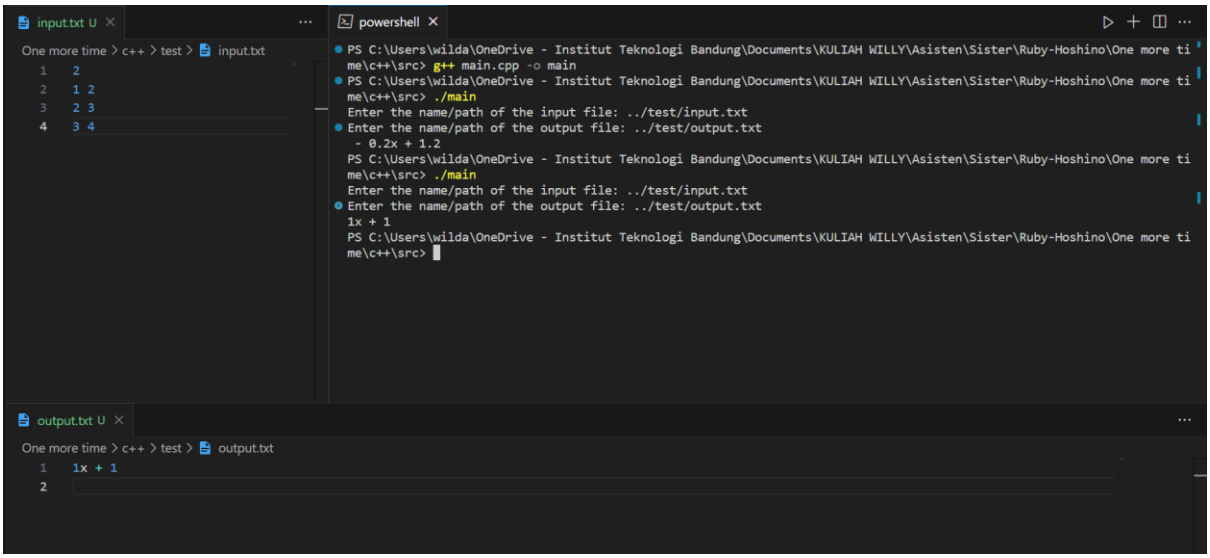
yang berarti y = `ax^n + bx^n-1 + ... + px + q`
dengan ^ merupakan pangkat yang berarti ax**n = ax^n

N = n – 1

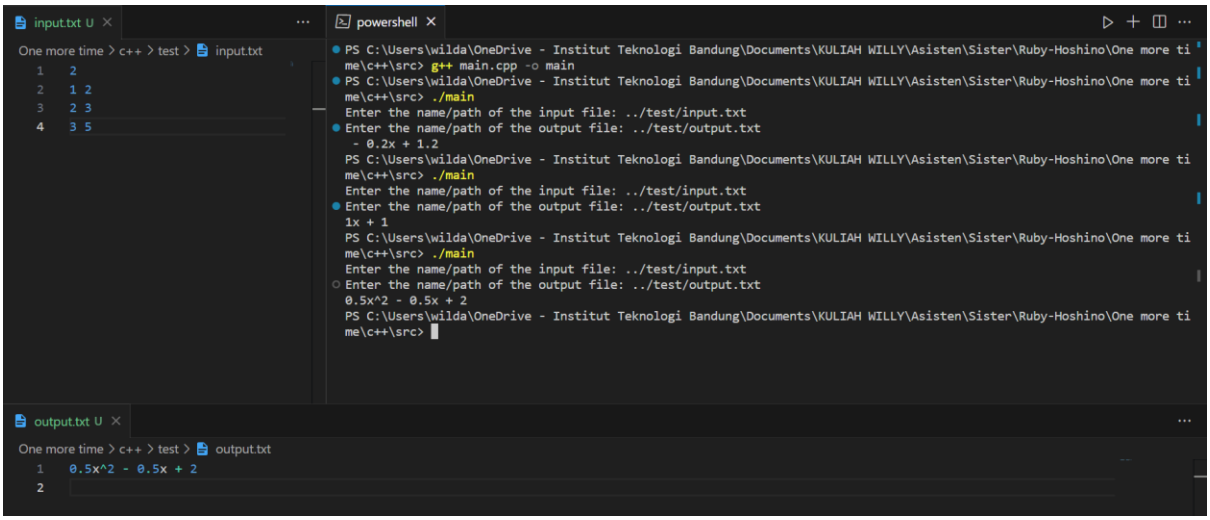
1. N = 1



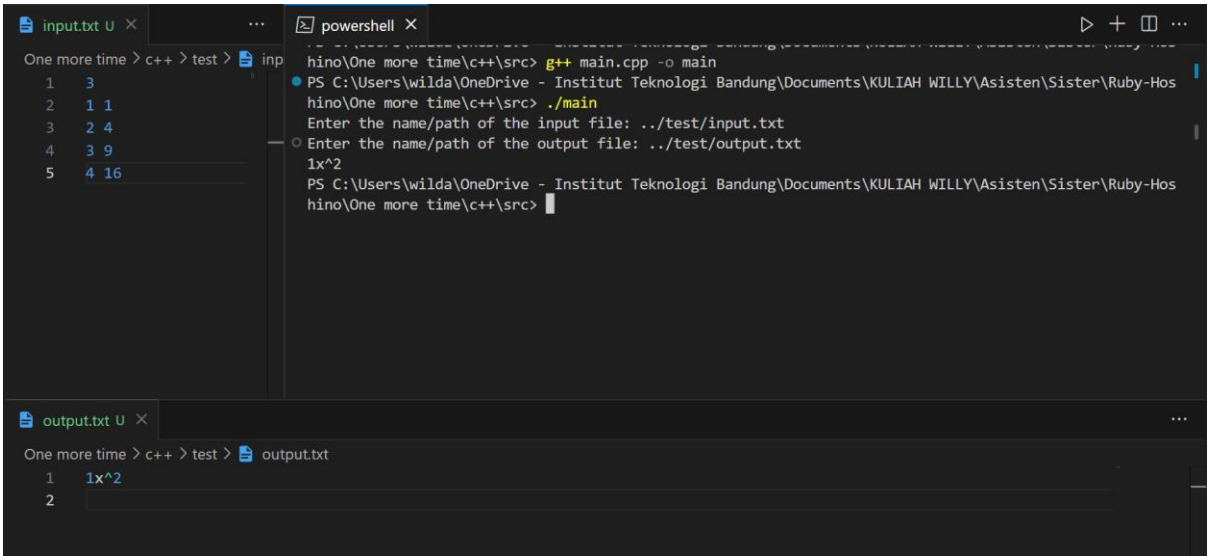
2. N = 2


input.txt U
One more time > c++ > test > input.txt
2
1 2
2 3
3 4
powershell
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> g++ main.cpp -o main
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
- 0.2x + 1.2
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
1x + 1
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src>
output.txt U
One more time > c++ > test > output.txt
1x + 1

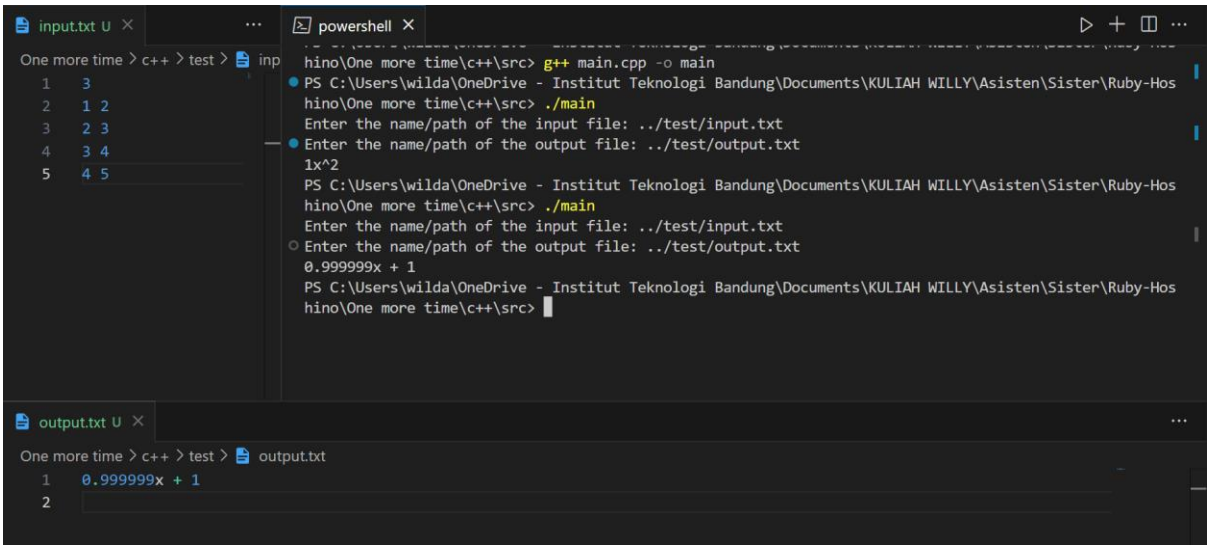
3. N = 2


input.txt U
One more time > c++ > test > input.txt
2
1 2
2 3
3 5
powershell
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> g++ main.cpp -o main
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
- 0.2x + 1.2
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
1x + 1
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
0.5x^2 - 0.5x + 2
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src>
output.txt U
One more time > c++ > test > output.txt
0.5x^2 - 0.5x + 2

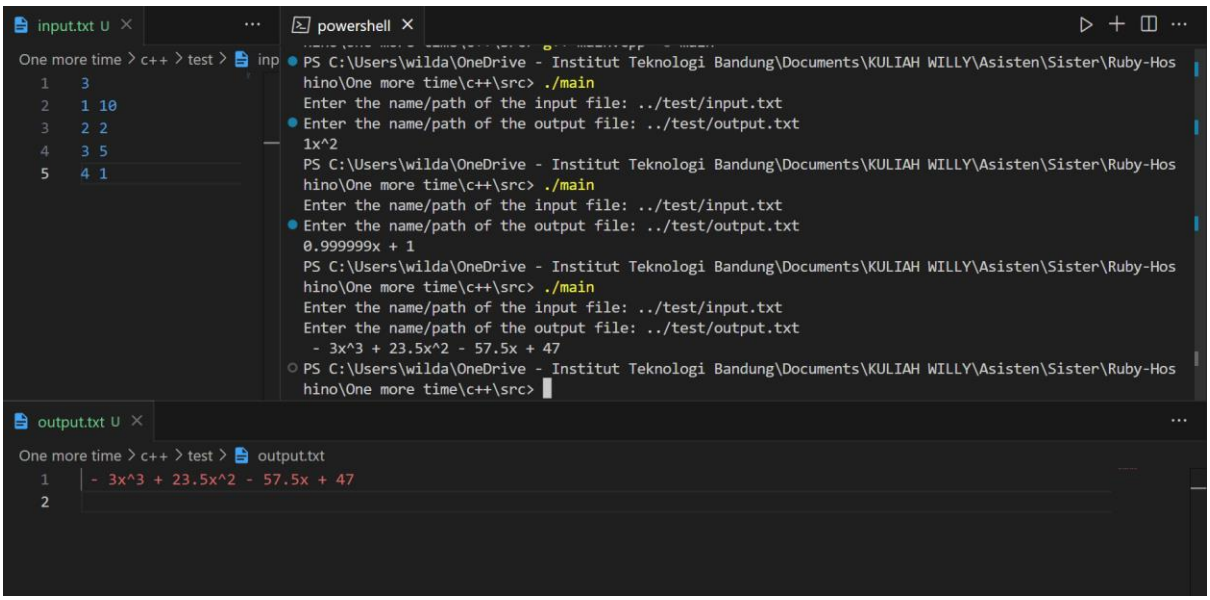
4. N = 3


input.txt U
One more time > c++ > test > inp
3
1 1
2 4
3 9
4 16
powershell
hino\One more time\c++\src> g++ main.cpp -o main
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
1x^2
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hoshino\One more time\c++\src>
output.txt U
One more time > c++ > test > output.txt
1x^2

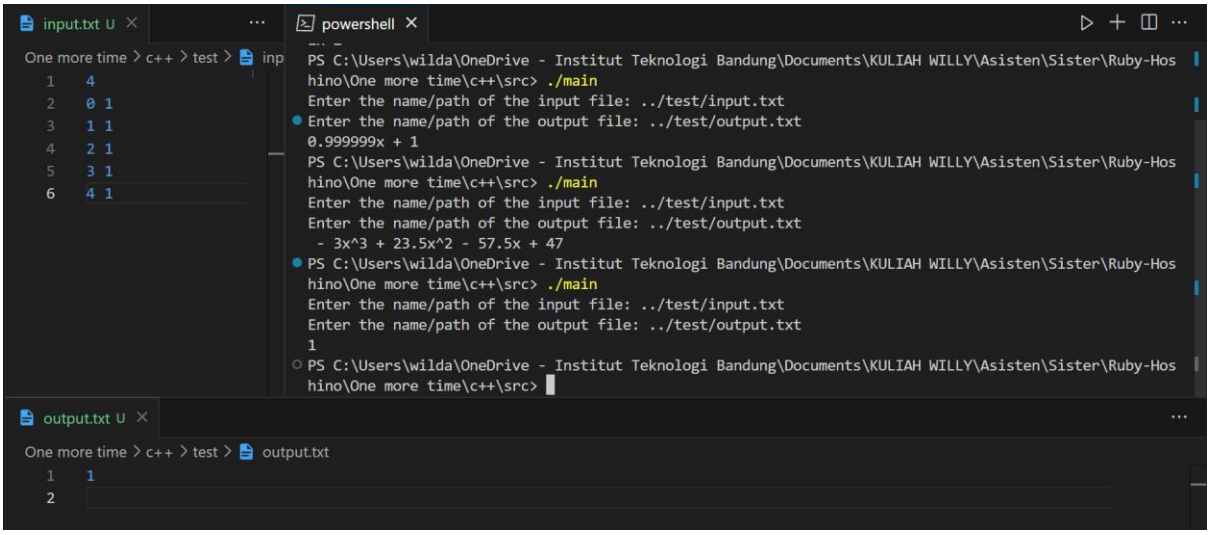
5. N = 3


input.txt U
One more time > c++ > test > inp
3
1 2
2 3
3 4
4 5
powershell
hino\One more time\c++\src> g++ main.cpp -o main
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
1x^2
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
0.999999x + 1
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src>
output.txt U
One more time > c++ > test > output.txt
0.999999x + 1

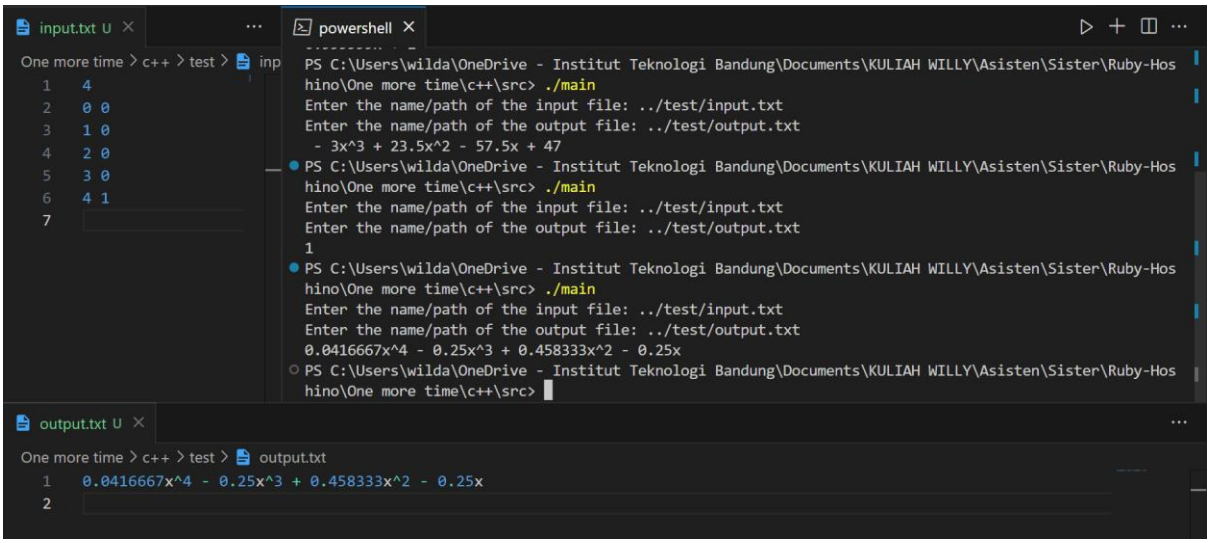
6. N = 3


input.txt U
One more time > c++ > test > inp
3
1 10
2 2
3 5
4 1
powershell
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
1x^2
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
0.999999x + 1
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
- 3x^3 + 23.5x^2 - 57.5x + 47
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src>
output.txt U
One more time > c++ > test > output.txt
- 3x^3 + 23.5x^2 - 57.5x + 47

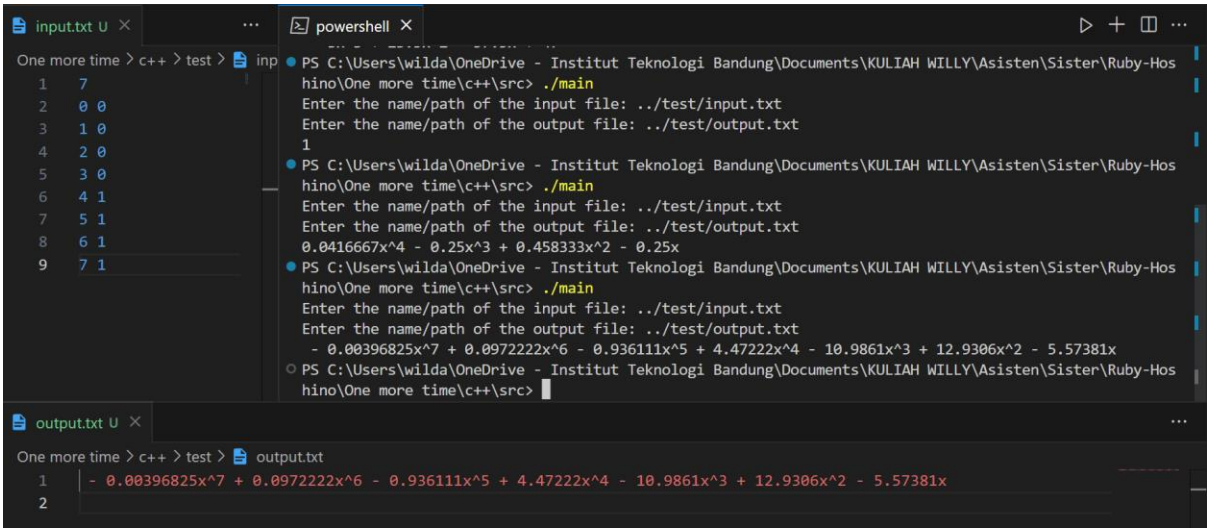
7. N = 4


input.txt U
One more time > c++ > test > inp
4
0 1
1 1
2 1
3 1
4 1
powershell
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
0.999999x + 1
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
- 3x^3 + 23.5x^2 - 57.5x + 47
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src> ./main
Enter the name/path of the input file: ../test/input.txt
Enter the name/path of the output file: ../test/output.txt
1
PS C:\Users\wilda\OneDrive - Institut Teknologi Bandung\Documents\KULIAH WILLY\Asisten\Sister\Ruby-Hos
hino\One more time\c++\src>
output.txt U
One more time > c++ > test > output.txt
1

8. N = 4



9. N = 7



10. N = 10