資料結構報告

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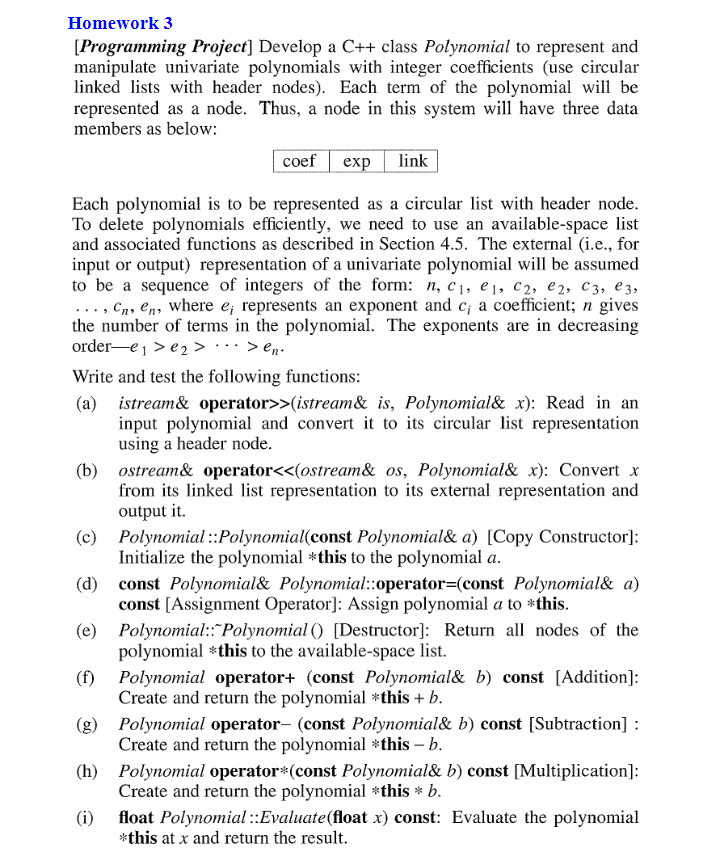
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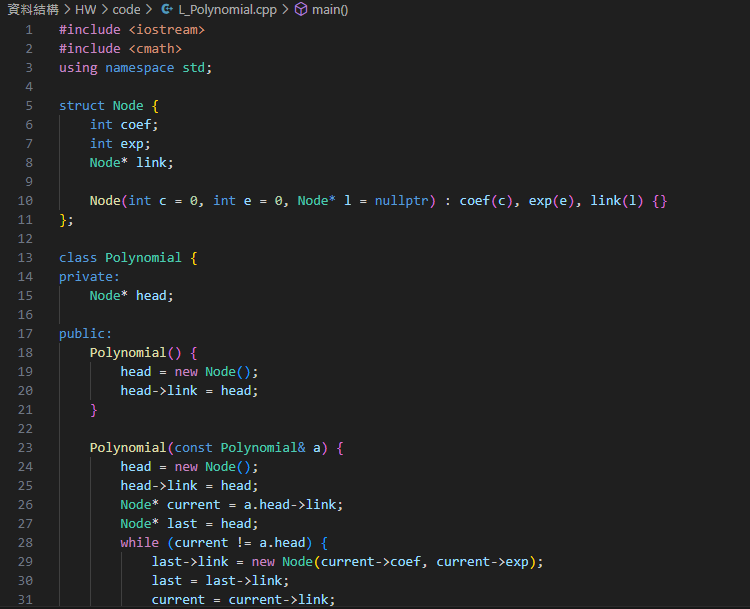
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1. 解題說明

使用有標頭的串列來時做多項式的各項功能



1. 演算法設計與實作

Figure2.1.1:L\_Polynomial.cpp

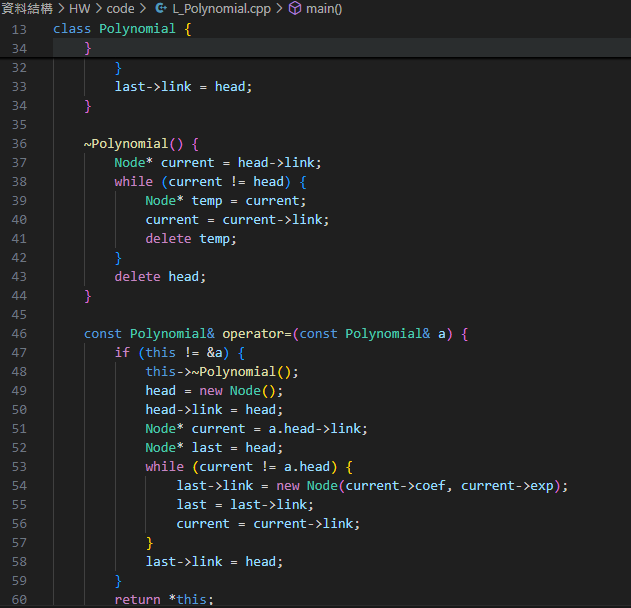
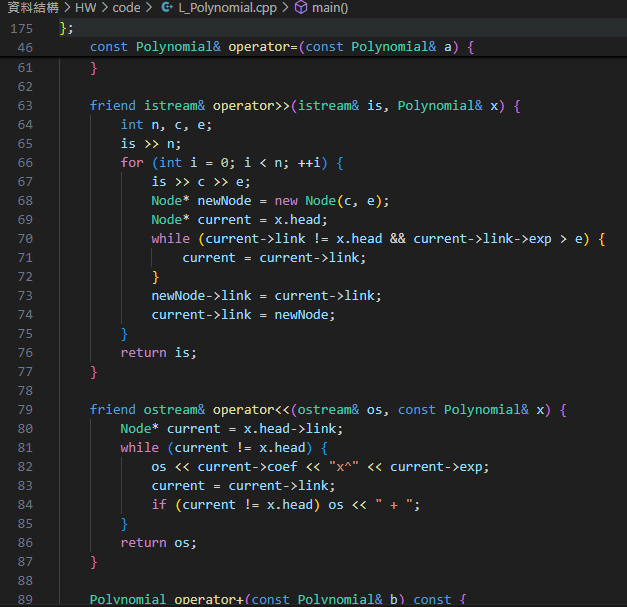
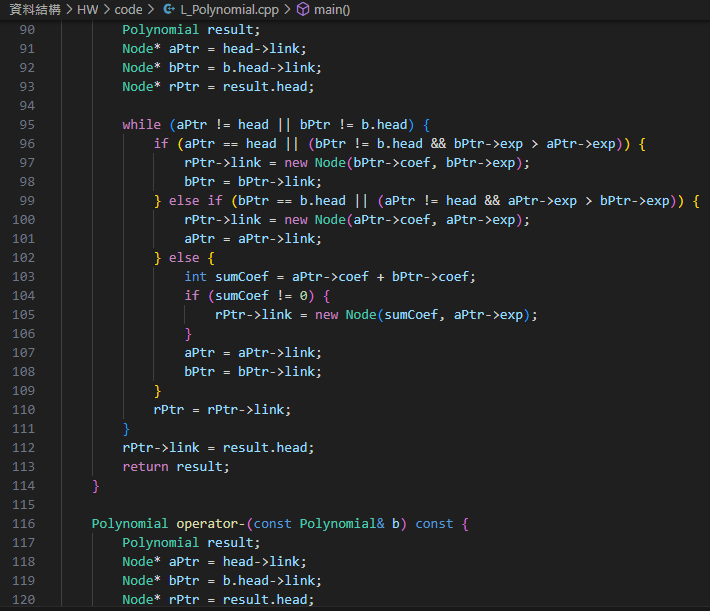
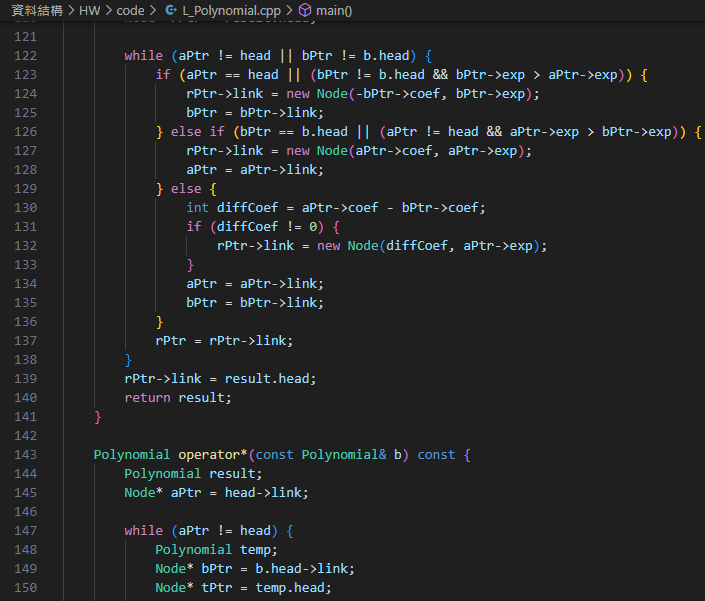
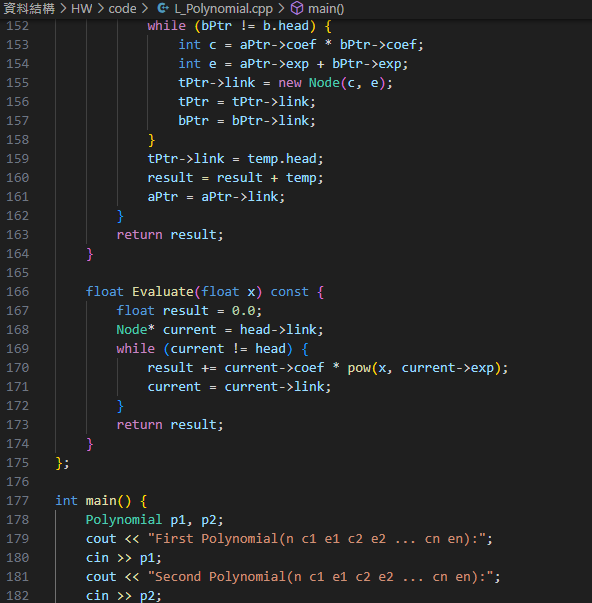
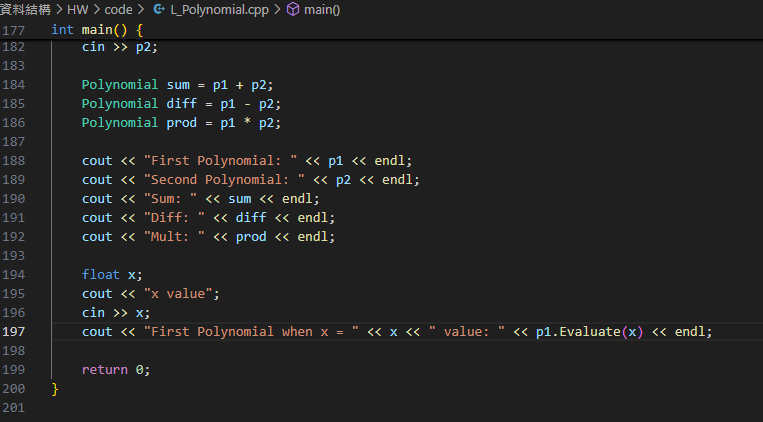


Figure2.1.2:L\_Polynomial.cpp  Figure2.1.3:L\_Polynomial.cpp  Figure2.1.4:L\_Polynomial.cpp  Figure2.1.5:L\_Polynomial.cpp  Figure2.1.6:L\_Polynomial.cpp  Figure2.1.7:L\_Polynomial.cpp

1. 效能分析

F(n) = O(n)

**時間複雜度**

Operator>>():O(n^2)

Operator<<():O(n)

Polynomial(const Polynomial& a):)O(n)

Operator=():O(n)

~Polynomial():O(n)

Operator+():O(n + m)

Operator-():O(n + m)

Operator\*():O)n \* m(

Evaluate():))(n)

**空間複雜度**

Operator>>():O(1)

Operator<<():O(1)

Plynomial():O(n)

Polynomial(const Polynomial& a):)O(n)

Operator=():O(n)

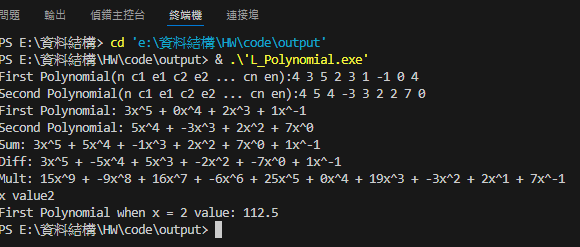
Operator+():O(n + m)

Operator-():O(n + m)

Operator\*():O)n \* m(

Evaluate():O(1)

1. 測試與過程

 Figure4.1:L\_Polynomial.cpp