

QUIZ 8

COMP9021 PRINCIPLES OF PROGRAMMING

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$ python3
>>> from quiz_8 import *
>>> p = Polynomial()
>>> print(p + Polynomial('2'))
2
>>> print(p)
0
>>> p += Polynomial('2')
>>> print(p)
2
>>> p = Polynomial('3')
>>> print(p + Polynomial('-3'))
0
>>> print(p)
3
>>> p += Polynomial('-3')
>>> print(p)
0
>>> p = Polynomial('x')
>>> print(p + Polynomial('2x^3 + x - 4'))
2x^3 + 2x - 4
>>> print(p)
x
>>> p += Polynomial('2x^3 + x - 4')
>>> print(p)
2x^3 + 2x - 4
>>> p = Polynomial('4x^5 - x^2 + 6')
>>> print(p * Polynomial('x^3 - x + 4'))
4x^8 - 4x^6 + 15x^5 + 7x^3 - 4x^2 - 6x + 24
>>> print(p)
4x^5 - x^2 + 6
>>> p *= Polynomial('x^3 - x + 4')
>>> print(p)
4x^8 - 4x^6 + 15x^5 + 7x^3 - 4x^2 - 6x + 24
>>> p = Polynomial('x^4 - x^3 + x^2 - x')
>>> print(p * Polynomial('-2x^3 + 3x^2 - 4x + 5'))
-2x^7 + 5x^6 - 9x^5 + 14x^4 - 12x^3 + 9x^2 - 5x
>>> p *= Polynomial('-2x^3 + 3x^2 - 4x + 5')
>>> print(p)
-2x^7 + 5x^6 - 9x^5 + 14x^4 - 12x^3 + 9x^2 - 5x
```