Objective

Manipulate, with the below modules, the input polynomials from IN then move the correct answer to OUT.

Modules manual

Module	Description and examples
IN	If there are no polynomials present, gives the next input. Paused if there is no OUT. Multiple IN modules will each send a copy.
OUT	Consumes a polynomial and submits it as the output. This is the only way to submit outputs.
UP, DOWN, LEFT, RIGHT	Pushes the polynomial in the given direction, also changing its momentum. These modules can be placed over others without replacing them.
DER	Takes derivative.
INT	Returns the indefinite integral, with the constant of integration always set to $C = 1$. INT $[4x^3 + x^2] =$ $[x^4 + \frac{1}{3}x^3 + 1]$ INT $[0] =$ $[1]$
LEAD	Returns the leading coefficient.
CONST	Returns the constant term.
RAISE	Raises the index of the exponent in each term, effectively multiplying the polynomial by x. RAISE $[x^6 - 2x^3 + 1] =$ $[x^7 - 2x^4 + x]$
LOWER	Lowers the index of the exponent in each term and discards the constant. LOWER $[5x^5 - 3x^2 + 1] =$ $[5x^4 - 3x]$
DEG	Returns the degree of the polynomial or consumes $[0]$. DEG $[2x^7 - 4x^3] =$ 7 DEG $[-3] =$ 0 DEG $[0]$ has no output and is instead consumed.
NEG	Multiplies by -1.
TAKE	Removes the leading term and returns what is left.
COPY	COPY shoots out two copies of the incoming polynomial perpendicularly.
POW	When a nonnegative integer $[a]$ passes through POW it is transformed to $[x^a]$. Negative constants pass through freely. Everything else is consumed. POW $[2] =$ $[x^2]$ POW $[0] = [1]$ POW $[-4] = [-4]$ POW [-1/2] = [-1/2] POW [5/3] is consumed. POW $[x^2]$ is consumed.
SUBS	Consumes everything. After consuming both a non-constant and a constant polynomial it returns the value obtained by substituting the constant in the polynomial. SUBS $\left[x^3 - \frac{x^2}{4} + 5\right]$ $[2] =$ $[12]$ because $2^3 - \frac{2^2}{4} + 5 = 8 - 1 + 5 = 12$
SUM	Consumes and stores the first passing polynomial. It then adds it to the next passing polynomial. SUM $[x^3 - 2x]$ $[x^2 + 2x - 1] =$ $[x^2 + x^2 - 1]$
DOOR	Consumes two polynomials, a visitor and a key, in either order. If the key is $[0]$ then the visitor is allowed to pass through. DOOR $[0]$ $[7] =$ $[7]$ DOOR $[x^5 + 3]$ $[0] =$ $[x^5 + 3]$ DOOR $[-x^2 + 2x]$ $[x^8]$ both will be consumed.