

poly

The *poly* tool returns the coefficients of a polynomial with the given sequence of roots.

```
print numpy.poly([-1, 1, 1, 10])          #Output : [ 1 -11  9  11 -10]
```

roots

The *roots* tool returns the roots of a polynomial with the given coefficients.

```
print numpy.roots([1, 0, -1])             #Output : [-1.  1.]
```

polyint

The *polyint* tool returns an antiderivative (indefinite integral) of a polynomial.

```
print numpy.polyint([1, 1, 1])            #Output : [ 0.33333333  0.5         1.          0.          ]
```

polyder

The *polyder* tool returns the derivative of the specified order of a polynomial.

```
print numpy.polyder([1, 1, 1, 1])         #Output : [3 2 1]
```

polyval

The *polyval* tool evaluates the polynomial at specific value.

```
print numpy.polyval([1, -2, 0, 2], 4)     #Output : 34
```

polyfit

The *polyfit* tool fits a polynomial of a specified order to a set of data using a least-squares approach.

```
print numpy.polyfit([0,1,-1, 2, -2], [0,1,1, 4, 4], 2)
#Output : [ 1.00000000e+00  0.00000000e+00 -3.97205465e-16]
```

The functions [polyadd](#), [polysub](#), [polymul](#), and [polydiv](#) also handle proper addition, subtraction, multiplication, and division of polynomial coefficients, respectively.

Task

You are given the coefficients of a polynomial P .

Your task is to find the value of P at point x .

Input Format

The first line contains the space separated value of the coefficients in P .

The second line contains the value of x .

Output Format

Print the desired value.

Sample Input

```
1.1 2 3
0
```

Sample Output

```
3.0
```