

Academic Results Prediction Function

A researcher has formulated the chance $p(x)$ that a student x will pass a course from the number of problems solved (x_0) and the GPA (x_1) as follows:

$$p(x) = \frac{1}{1 + e^{-\text{logit}(x)}}$$

$$\text{logit}(x) = -3.98 + 0.1x_0 + 0.5x_1$$

Write the function $p(x)$ that works according to the comments below:

```
import numpy as np

def p(x):
    # x is an array with size n x 2, containing the number of
    # problems solved (column 0), and GPA (column 1) of n students.
    #
    # Return an array with size n, containing the probability that each
    # student will pass the course, calculated with the formula above.
    #
    # Using NumPy will allow you to write this function without
    # using loops. (The answer is no more than 3 lines).

exec(input().strip()) # This line is required for Grader to work.
```

Input

A Python command for testing the function.

Output

The result from doing the command.

Example

Input (from keyboard)	Output (on screen)
print(p(np.array([[100, 4.00]])))	[0.99967129]
print(p(np.array([[80, 2.50], [1, 4.00]])))	[0.99488271 0.13238887]