
Scalar product

P71310_en

The scalar product of two vectors $u = (u_0, \dots, u_{n-1})$ and $v = (v_0, \dots, v_{n-1})$ is $\sum_{i=0}^{n-1} u_i v_i$.

Write a function that returns the scalar product of @u@ and @v@.

Interface

C++	double scalar_product(const vector<double>& u, const vector<double>& v);
C	double scalar_product(int n, double u[n], double v[n]);
Java	public static double scalarProduct(double[] u, double[] v);
Python	scalar_product (u, v) # returns float
MyPy	scalar_product (u: list [float], v: list [float]) -> float

Precondition

The vectors @u@ and @v@ have the same size.

Observation

You only need to submit the required procedure; your main program will be ignored.

Problem information

Author: Jordi Petit

Translator: Carlos Molina

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