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The Virtual Learning Environment for Computer Programming

Scalar product   P71310_en

The scalar product of two vectors $u = (u_0, \ldots, u_{n-1})$ and $v = (v_0, \ldots, v_{n-1})$ 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

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