Assignment 2

1. (1,5) Create a class Vector with real values and parameter length (MAX_LENGTH = 15); constructor with a given length as a parameter, method copyElements that copy elements of an array given as an argument into the vector's elements; methods setElement and getElement for setting/getting values of a given element v_i at the position i, set_l and get_l for length, printing of the vector in a form $(v_0, \ldots, v_{length-1})$, methods for calculating scalar and vector products of two vectors. Use exceptions for problematic cases (e.g., different lengths in operands of scalar and vector product, position of setElement and getElement outside the range, length bigger than 15, etc.). If you want, you can use even user-defined class VectorException.
   Create a class TestVector for testing purposes.