

**Introduction to Programming**  
**Practice – Advanced functions**

Write a function called **varInP** with one mandatory input argument – a numerical data matrix, and one **optional** input argument – an integer. The function should calculate the mean of the numbers in one of the rows of the input data matrix – the row whose number is given by the second input argument – and return this calculated mean (a scalar) as its output argument.

- If no second input was provided the function should calculate the mean of the first row.
- If the second input that was provided by the user has an invalid value then the function should return an empty array as its output. Invalid values of the second input include: a negative number (or zero), or a number larger than the number of rows in the matrix.

Use 'varargin' and/or 'nargin' in your code.