**Task №2**

1. Develop yourself using numpy library:

a) a function to implement stochastic gradient descent (SGD) algorithm

b) Adam's optimization algorithm

for a function of two variables f(x,y).

2. Come up with a function of two variables of an arbitrary form and implement the search for its minimum using those implemented in p.1 functions - a) and b).

3. Illustrate the process of finding an extremum in the form of a graph of the dependence of the value of the difference between two successive approximations of the solution (x\_next – x\_prev) on the iteration number N.