Selftest

Not so anonymous functions

An anonymous function does not have a name, but we can give one to it. For example, we can say:

    square = lambda x: x*x

to define a function square instead of the more traditional (and preferable)

    def square2(x):
        return x*x

Use this to define functions cube and bisquare.

Rewriting with keyword arguments

The following code calculates the integral \( \int_a^b f(x) \, dx \) as the average value of \( f \) in the interval from \( a \) to \( b \) estimated by taking 100 random points in \([a, b]\) multiplied by the length \((b - a)\) of the interval. The programmer choose to give descriptive names to the variables. Change the function so that it forces the user to use named arguments.

    def integral(function, lower, upper):
        suma = 0
        for _ in range(100):
            suma += function(random.uniform(lower, upper))
        return suma/100 * (upper-lower)

Introduce (after the first line) an explanation what the function does using triple quotation marks """. Then see what help(integral) does.