

3rd Exercise in HPC

Exercise 1 (2P)

In the lecture the Mandelbrot problem has been discussed.

The **Mandelbrot set** is the set of complex numbers c for which the function $f_c(z) = z^2 + c$ does not diverge when iterated from $z = 0$, i.e., for which the sequence $f_c(0)$, $f_c(f_c(0))$, etc., remains bounded in absolute value .

Wikipedia

Write a program in C or C# to visualize the phenomena. Use 100 000 as the maximum iteration value and 4 as threshold.