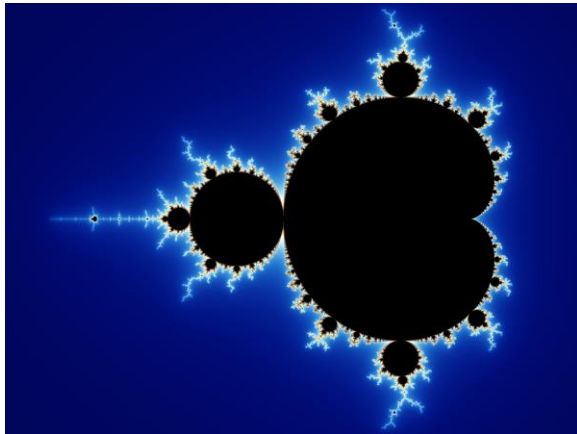


Examples

Example for regular numba:

File **numba_ex.py**

- 1) file computes mandelbrot set
- 2) functions are attributed with "@jit" mark
- 3) compare computational times when you comment/uncomment "@jit"



Example for cuda numba:

File **cuda_numba_ex.py**

- 1) file performs SAXPY;
- 2) first saxpy is performed on cpu using numpy arrays;
- 3) then necessary arrays are allocated on gpu;
- 4) saxpy is performed on gpu;
- 5) the result is transfered back to cpu;
- 6) analyze computational time of every stage of the program;

$$z = \alpha x + y$$

x, y, z : vector
 α : scalar