

In the name of God

Department of Physics  
Shahid Beheshti University

**NUMERICAL ANALYSIS COURSE**

**Exercise Set 9**

**(Due Date: 1403/09/30)**

1. Write a computational program to make Mandelbrot set.
2. Write a computational program to make Julia set for  $f(z) = z^2 + c$  with  $c = -0.8 + 0.156i$ ,  $c = 0.45 + 0.1428i$  and  $0.285 + 0.01i$ .
3. Write a program to make Fractal tree.

Good luck, Movahed

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