

# Session 7 : Algorithms and Errors

Session Date : 07/09/2016

## Topic Overview

Reading error messages and debugging. Introduction to algorithmic thinking.

## Learning Objectives

By the end of the session, students will be able to:

- Determine where an error occurred within a large program
- Improve program performance by focusing on choice of algorithm

## Before the Session

Before the session, students should:

- Research the difference between CPU and RAM; come prepared to discuss
- Complete numerical problem solving challenges you were unable to complete during class
- Write incorrect Python programs and try running them on your computer. Read through the error messages and come prepared with questions

## During the Session

During the session on 07/09/2016 , we will:

- Raise, and handle, standard Python Exceptions
- Measure the performance of different algorithms to understand performance trade-offs
- Complete debugging challenges, incorporating error handling best practices (due 07/09/2016)
- Complete all remaining numerical problem solving challenges (due 07/09/2016)
- Re-cap of course 1 material through questions and answers

## After the Session

After the session, students should:

- Research Python functions
- Relax. Congratulations on completing course 1!