

# Session 7 : Algorithms and Errors

Session Date : 06/29/2017

## 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 06/29/2017 , 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 07/09/2017)
- Complete all remaining numerical problem solving challenges (due 07/06/2017)
- Re-cap of course 1 material through questions and answers
- Break off into groups of 2 for final project

## After the Session

After the session, students should:

- Research Python functions
- Work on your project for last class