

## Lab 2: Algorithm/Flowchart Design

### ...Previously

Recall that the very first lab was on basic *Scratch* programming just to get you acquainted with key programming concepts before we start Python programming. .

### Today...

Flowcharting with **RAPTOR** tool

### Brainstorm Questions

1. What is algorithm? Give an example. What are some characteristics of a good algorithm?
2. What is flowchart? What are the various symbols used?

### Activity 1:

1. Find out what RAPTOR (**R**apid **A**lgorithmic **P**rototyping **T**ool for **O**rdered **R**easoning) is.
2. Which symbols does it use? What does each symbol represent?
3. Familiarize yourself with the RAPTOR environment.

{**Resources:** HELP menu, RAPTOR website}

### Activity 2:

Using RAPTOR, draw a flowchart that:

1. Prints the message, "Kuzu zangpo."
2. Accepts name of a person and displays, "Kuzu zangpo, {the name}" .
3. Finds the sum of two integer numbers.
4. Computes the perimeter of a rectangle.
5. Determines the maximum of two numbers. How about of three numbers?
6. Calculates the roots of a quadratic equation (if any).
7. Displays/prints integer numbers from 1 to 50.

