

ED1021 - Introduction to computation and visualisation

L2 - Flowcharts

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Course web page: <https://ed.iitm.ac.in/~raman/introcomp.html>

Moodle page: Available at <https://courses.iitm.ac.in/>

What is a flowchart?

- Pictorial representation of an algorithm.
- Uses various geometry-based shapes to represent input, output, instructions etc.
- Arrow marks represents the direction of flow (very important).

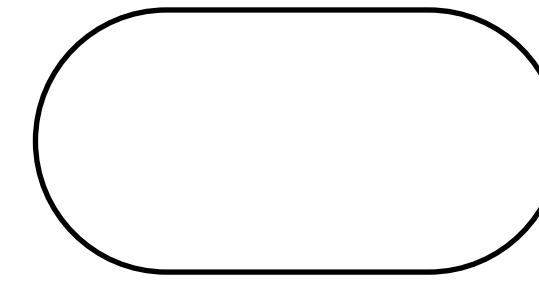
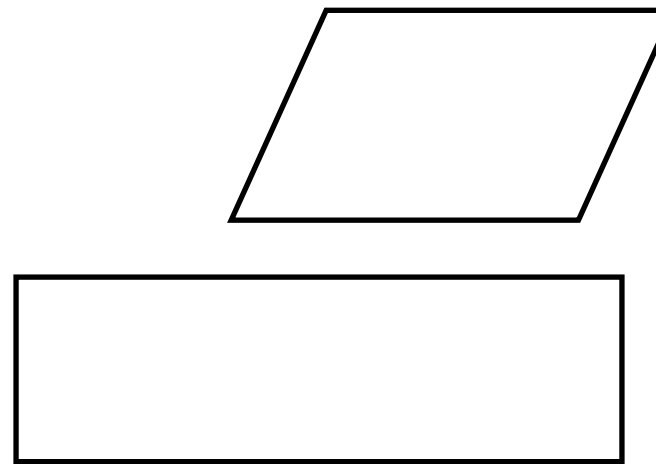
Recap of the algorithm for adding two numbers

- Read two numbers x and y .
- Add them.
- Output the added number.

Flowchart

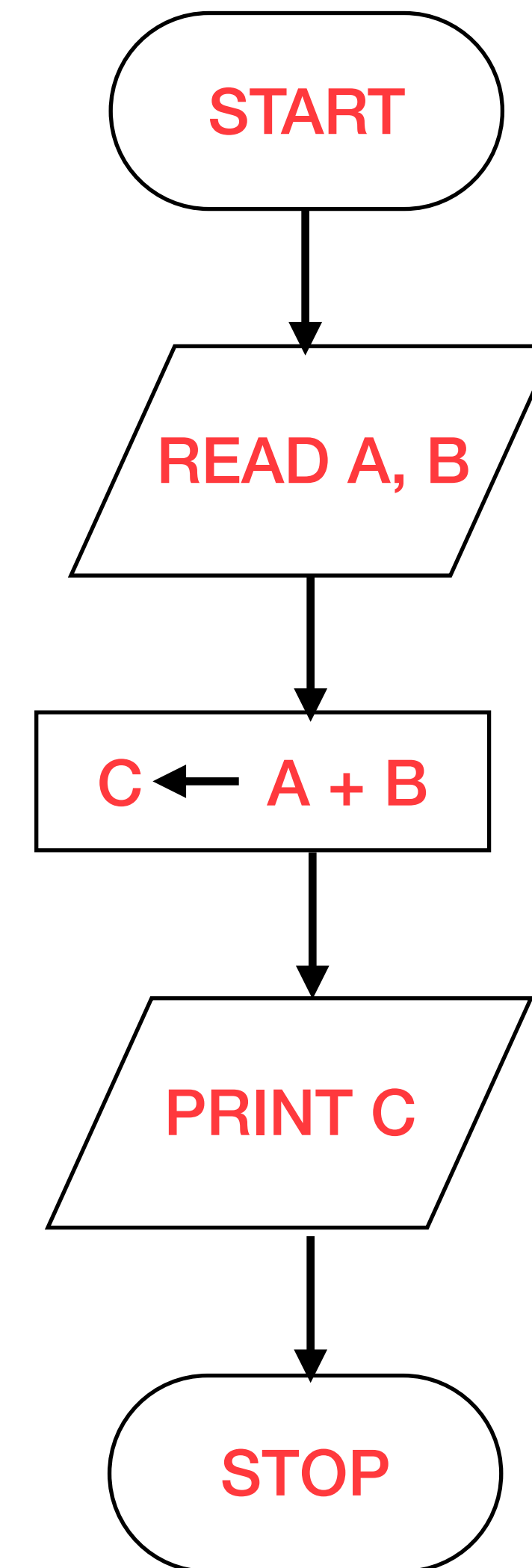
Basic shapes and purpose

- Start and stop - Oval or rounded rectangle
- Input / Output - Parallelogram
- Instructions - rectangle.



Flowchart

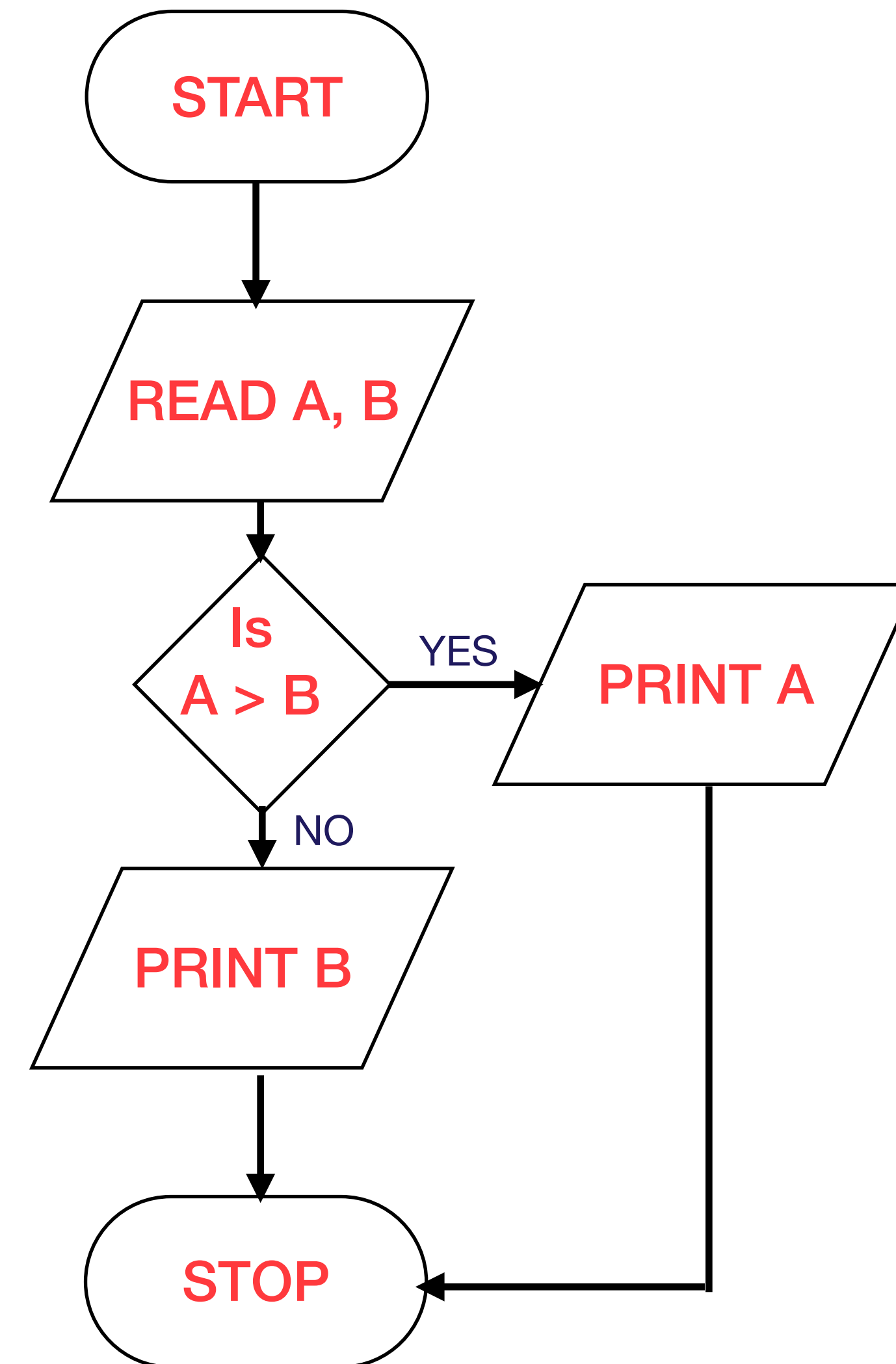
Example - Adding two numbers



Decision box

Diamond-shaped box

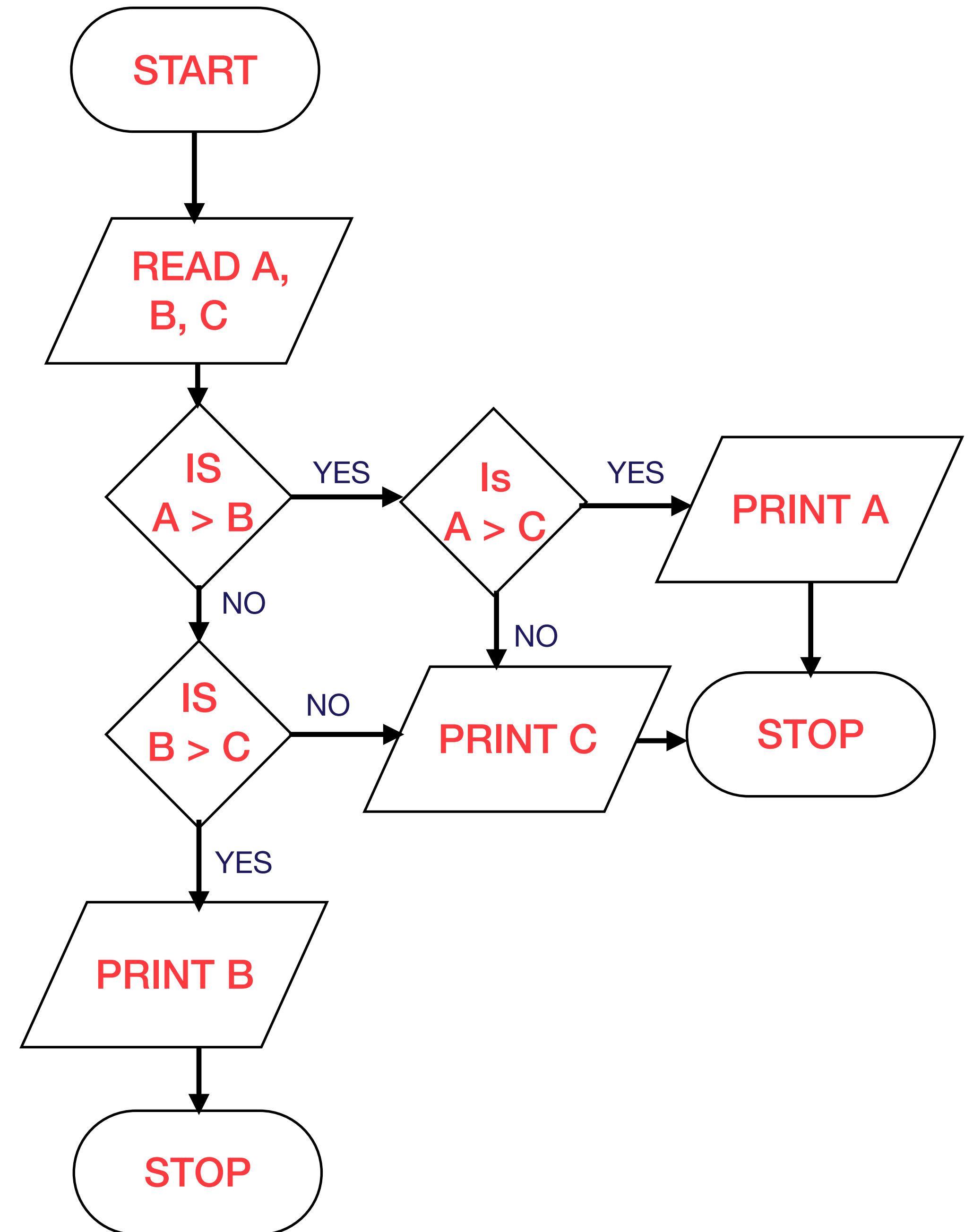
- Checking for a condition
- Printing the greater of two numbers



Flowchart

Finding the greatest of three numbers

- 3 minutes



Flowchart

Homework problems

- Find out all the other symbols used in a flowchart.
- Draw a flowchart for finding the largest of four numbers.
- Draw a flowchart for finding out the largest of 'N' numbers.