



PRIFYSGOL  
**BANGOR**  
UNIVERSITY

**ICP 1023 OO Programming in Java**  
**Laboratory 1 – Revision**

*School of Computer Science, Bangor University*

# Laboratory 1: Aims and Objectives

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## ▶ **Aims**

- ▶ To revise fundamental concepts from ICP 1022

## ▶ **Objectives**

- ▶ Implement simple algorithms in Java
- ▶ Use methods to structure program solutions
- ▶ Use library methods to solve problems (e.g. random number generation)
- ▶ Access data stored in files

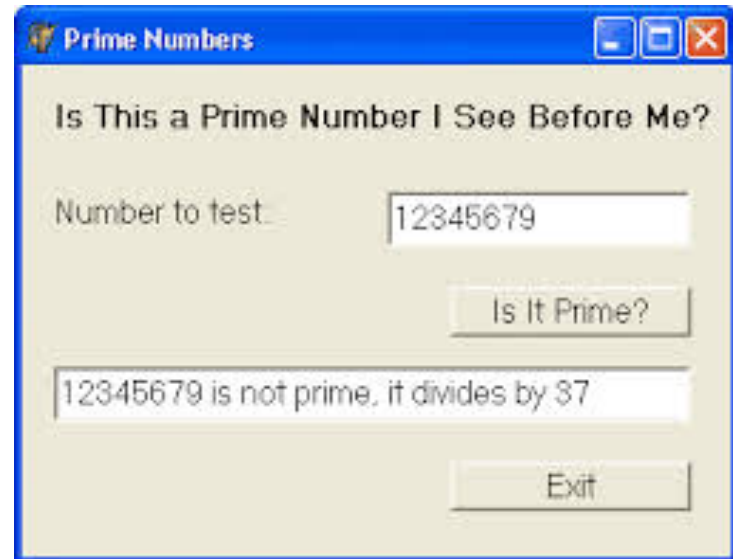


# What is an Algorithm?

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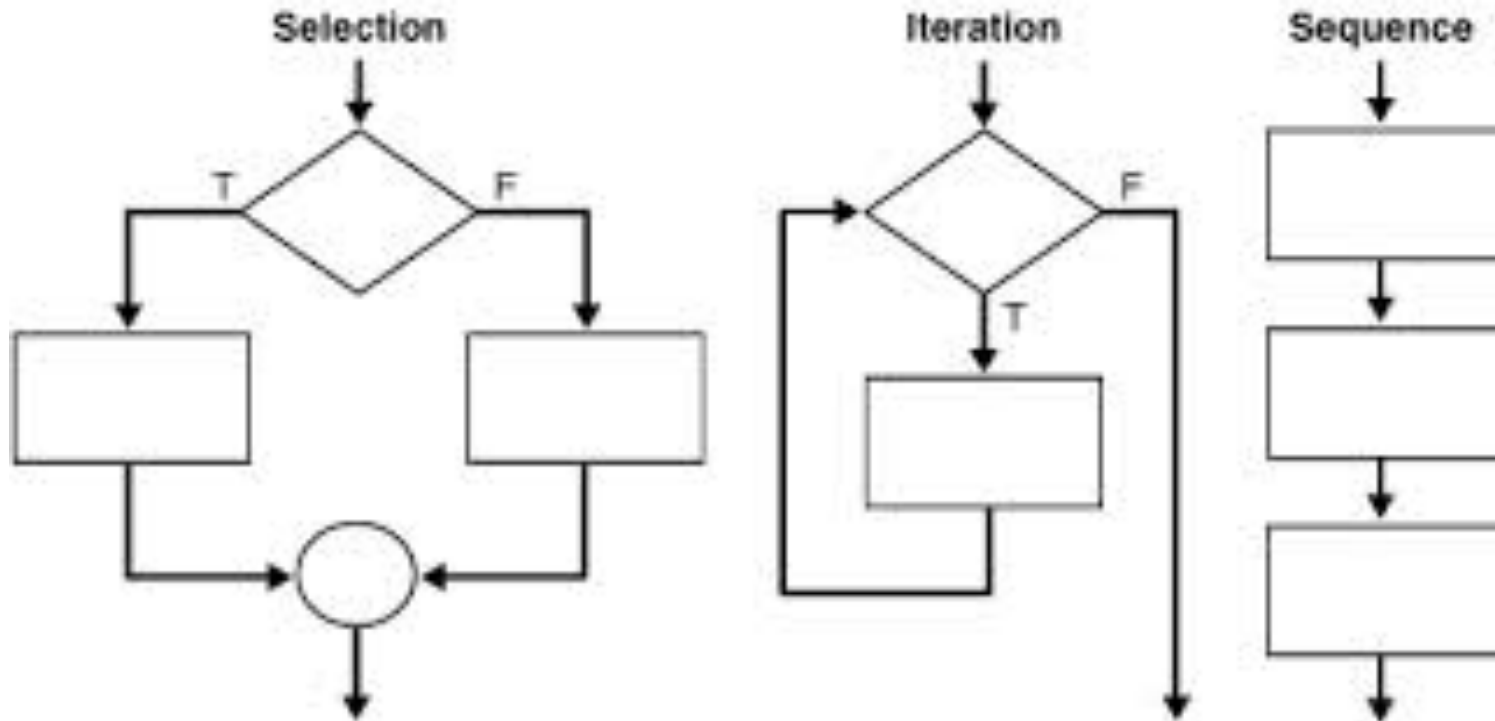
An unambiguous, executable, and terminating specification of a way to solve a problem.

*Big Java: Late Objects*  
Glossary



# Control Constructs

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# Stepwise Refinement

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- ▶ Break a big task into smaller tasks
- ▶ Map the smaller tasks to Java
- ▶ Stepwise refinement is a heuristic not an algorithm

