



# Program Design

Lab 5

---

- **Instructions**

- Complete Part 1 and Part 2 detailed below.
- Please provide screenshots of your solutions in a PDF document.
- Please provide all source files for your diagrams

- **Marking Scheme:**

- ***Part 1 (10 marks):***


- Marks will be deducted for incorrect logic, mistakes on diagrams, missing source files and for no attempts.

- ***Part 2 (10 marks):***

- Marks will be deducted for incorrect logic, mistakes on diagrams, missing source files and for no attempts.

# Instructions

---



Construct a flowchart by using the Dia / Yed Diagram Editor for the problem: Print out the biggest of four inputted numbers.

*Hint: try to find the optimal solution for this. The flowchart for the optimal solution is relatively small*

**Part 1 – 10 Marks**

---



**Construct a flowchart using the Dia/Yed Diagram Editor for the following problem:**

**Create a program to divide a group of people into two teams (Team A and Team B).**

The program should contain the following:

Ask a user to enter the full name (eg. Jon McCarthy).

If the number of characters in the users name is even, put the user on Team A.

If the number of characters in the users name is odd, put the user on Team B.

If a name is entered as "exit", display the following then end program:

- total number of names entered
- the number of people on team A
- the list of people on Team A
- the number of people on team B
- the list of people on Team B

**Hint:**

**Use 2 Arrays to store the Teams.**

# **Part 2 – 10 Marks**

---