### Assignment 2

Data Structures & Algorithms

BSc in Computing (Software Development) Year 2

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**Problem Statement**

Postman Pat became bored one night at the postal sorting office and to break the monotony of the nightshift, he carried out the following experiment with a row of mailboxes (all initially closed) in the post office. These mailboxes are numbered 1 through to 150, and beginning with mailbox 2, he opened the doors of all the even-numbered mailboxes. Next, beginning with mailbox 3, he went to every third mailbox, opening its door if it was closed and closing it if it was open. Then he repeated this procedure with every fourth door, then every fifth door, and so on. When he finished, he was surprised at the distribution of closed mailboxes. Write a program to determine and display which mailboxes these were (i.e. which doors were closed at the end of the process).

Deadline: **Upload your solution to Moodle on or before your practical session in the week beginning October 19th 2015. Sign off during your practical on that week.**

Please have the following available for collection during your practical session:

1. The working version of the above.
2. A verbal explanation of the programs outcome, if requested.
3. Take the appropriate steps to backup your work at all times. Remember, PCs and Servers do fail and lose data.
4. Deadline exceptions can only be made in special circumstances (e.g. provide sick cert).