Course 161/2S3, Tutorial Sheet 3

- Write a `C` program which uses `while` loops to calculate the mean and variance of N numbers. Modify the program so that it uses `for` loops rather than `while` loops.
  Note
  The mean, $\bar{x}$ of the numbers x_i is

  $$\bar{x} = \frac{1}{N} \sum_{i=0}^{N-1} x_i$$

  The standard deviation σ of the numbers is.

  $$\sigma = \sqrt{\left(\frac{1}{N} \sum_{i=0}^{N-1} (x_i - \bar{x})^2 \right)}$$

- Write a `C` program which calculates the sum of the absolute values of N numbers. Your program should read in N numbers first.