 Sales forecasting activity

Aim

To investigate monthly sales history data to predict how many product items to make and for when.

Task

1. One of the most important challenges for manufacturing businesses is to manufacture the correct amount of their product at the correct time to maximise sales without turning customers away due to shortages.
   * Use this [Sales History Simulator](https://docs.google.com/spreadsheets/d/1BR5E2G6Vox_GjadhuBHAXUo6jf221KXzds294CsZRLc/edit#gid=1827147307) to generate some monthly sales history for your product over the last 20 months, buy entering today’s date into the yellow cell. Assuming your product has a lead time of two months, use the monthly sales history to forecast how many products you product to sell in two months’ time so that you can plan your inventory needs now.
2. Another major challenge for manufacturing businesses is to manage their stock levels. Over-investment in stock reduces the company’s cash flow and makes it vulnerable to changes in the market. Additionally, warehousing stock is a costly venture, so minimising the stock levels helps maximise profits by reducing costs.
   * Using the monthly sales data generated in part 1, investigate the safety stock levels your company should adopt to ensure that 97.5% of all sales are met.

Lead time – research the definition of ‘lead time’ in the manufacturing industry.

Safety stock – research the definition of ‘safety stock’ in the manufacturing industry.