# Compute average credit period

## Objective : Compute the average credit period for receipt of payment in garment industry.

### Background:

The sales cycle in garment industry follows this pattern:

1. Purchase order is placed and the item is delivered (N times)
2. Payment is not made by the customer immediately for each order but made as a lumpsum amount that might not add up to all value of all the purchases made.
3. These purchase-payment transactions are recorded in the ledgers of the company as follows.

   A purchase transaction is recorded in the system as follows (Note the negative amount)

   | **Date** | **Voucher type** | | **Amount** |
   |---|---|---|---|
   | 10-07-2020 | Purchase | | -25561.00 |
   | 17-07-2020 | Purchase | | -572778.00 |

   A payment transaction is recorded as follows

   | **Date** | **Voucher type** | **Amount** |
   |---|---|---|
   | 27-07-2020 | Payment | 500000.00 |
   | 31-08-2020 | Payment | 230000.00 |

"Average credit period" is a metric used in identifying the customers who pay the bills on time(or otherwise). The logic to compute the average credit period is as follows:

1. Credit period for a purchase transaction = Date of Payment – Date of purchase
2. Average credit period is the average of credit periods for all purchase transactions.

### Problem Statement

Write a program to compute the average credit period for any customer. Sample purchase-payment transactions data is available in the attached spreadsheet.

Transactions.xlsx