Problem is to find the moving average for each customer for frame of 1 day . Attached is the input file

Logic for moving average

= currentday + previous day + next day /(total number of days which will be 3)

If (previous day is not present ) then currentday + nextday/ ( total number of days which will be 2 since previous day is not present)

If (next day is not present) then currentday + previousday / ( total number of days which will be 2 since next day is not present)

Example ( this will not match with the input file)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| customername | date | amountspent | moving average | How to calculate |
| Robert | 20170101 | 100 | 200 | (100+300) /2 = 200 ( since there is no data before20170101 |
| Robert | 20170102 | 300 | 233.3333333 | (100+300+300) /3 = 233.33 |
| Robert | 20170105 | 300 | 433.3333333 | (300+300+700) /3 = 433.33 |
| Robert | 20170106 | 700 | 400 | (300 + 700 + 200) /3 = 400 |
| Robert | 20170108 | 200 | 333.3333333 | (400 + 200 + 100) /3 = 333.33 |
| Robert | 20170109 | 100 | 150 | (200 + 100) /2 = 150 |

Notes:

* If the amountspent is blank or non numeric then make it as 0
* Ignore empty lines
* Sort data based on date for each customer
* Moving average must be calculated for each customer