CS917 Coursework 1 – Test Data

Part A

highest_price

Start Date	End Date	Expected Result
01/01/2016	31/01/2016	462.92
01/02/2016	28/02/2016	447.61
01/12/2016	31/12/2016	982.57

lowest_price

Start Date	end_date	Expected Result
01/01/2016	31/01/2016	350.39
01/02/2016	28/02/2016	365.27
01/12/2016	31/12/2016	741.08

max_volume

Start Date	End Date	Expected Result
01/01/2016	31/01/2016	268141.73
01/02/2016	28/02/2016	111626.76
01/12/2016	31/12/2016	102224.08

best_avg_value

Start Date	End Date	Expected Result
01/01/2016	31/01/2016	455.5523025617217
01/02/2016	28/02/2016	439.0143960593451
01/12/2016	31/12/2016	968.9494656981099

moving_average

Start Date	End Date	Expected Result
01/01/2016	31/01/2016	411.89
01/02/2016	28/02/2016	402.73
01/12/2016	31/12/2016	824.83

Part B

Data file might not exist

Setup: Move data file to a different folder and don't update your code
Expected result: "Error: dataset not found"

Data doesn't column expected columns

Setup: In a function where you use the key 'time', replace is with 'time1'
Expected result: "Error: requested column is missing from dataset"

Invalid date

To be tested anywhere you use the timestamp integer value, instead of the string "dd/mm/yyyy" format value.

Setup: Use a start_date of 1000. Use an end_date of 10001.
Expected result: "Error: invalid date value"

Out-of-range date values

Setup: Use a start_date of "01/01/2015". Use an end_date of "31/01/2015".
Expected result: "Error: date value is out of range"

Setup: Use a start_date of "01/01/2015". Use an end_date of "01/05/2015".
Expected result: "Error: date value is out of range"

Setup: Use a start_date of "01/10/2020". Use an end_date of "01/11/2020".
Expected result: "Error: date value is out of range"

End date is smaller than start date

Setup: Use a start_date of "01/01/2016". Use an end_date of "31/12/2015".
Expected result: "Error: end date must be larger than start date"

Part C

crossover_method

Start Date	End Date	Buy List	Sell List
01/05/2017	12/06/2017	['01/06/2017']	['28/05/2017']
05/09/2018	27/09/2018	['15/09/2018', '21/09/2018']	['06/09/2018', '19/09/2018', '27/09/2018']
03/11/2019	14/11/2019	['06/11/2019']	['04/11/2019', '08/11/2019']

Part D

Investment		Predict Next Average	Classify Trend
Start Date	End Date		
04/05/2015	27/05/2015	237.72045957687828	other
01/02/2016	28/02/2016	441.4238016565723	increasing
08/12/2016	11/12/2016	778.1930137752934	increasing