findNearbySensors

* Correct 4 nearby sensors with sensors1.csv

findNearbySensors(Sensor57, sensors, 4) : Sensor66 ; Sensor67 ; Sensor68 ; Sensor77

* 4 nearby sensors asked with only 3 sensors in sensors2.csv

findNearbySensors(Sensor57, sensors, 4) : Sensor66 ; Sensor67

* Reference sensor doesn’t exist in sensors3.csv

findNearbySensors(Sensor57, sensors, 4) : null

* No other sensor than the reference in sensors4.csv

findNearbySensors(Sensor57, sensors, 4) : null

calculateMeans

* Correct mean for Sensor57

CalculateMeans(Sensor57, 2018-12-31 12:00:00, 2019-02-02 12:00:00) : 75,75,25,50

* Mean asked for a sensor not in the csv

CalculateMeans(Sensor0, 2018-12-31 12:00:00, 2019-02-02 12:00:00) : null

* Mean asked for a sensor with no measurements during the period

CalculateMeans(Sensor66, 2019-02-01 12:00:00, 2019-02-02 12:00:00) : null

distance

* Correct Euclidean distance between two sensors in sensors1.csv

Distance(Sensor57,sensor66) : 0.8062

* Distance with one sensor which is not in sensors1.csv

Distance(Sensor57,sensor0) : 0

calculateWeightedMeans

* Correct weighted Means with sensors in sensors1.csv and measurements1.csv

nearbySensors = findNearbySensors(Sensor57, sensors, 4)

CalculateWeightedMeans(Sensor57, nearbySensors , 2018-12-31 12:00:00, 2019-04-02 12:00:00) : ……

* The selectedSensor doesn’t exist in sensors1.csv

nearbySensors = findNearbySensors(Sensor0, sensors, 4)

CalculateWeightedMeans(Sensor0, nearbySensors , 2018-12-31 12:00:00, 2019-04-02 12:00:00) : 0

* The selectedSensor doesn’t have nearby sensors in sensors2.csv

nearbySensors = findNearbySensors(Sensor57, sensors, 4)

CalculateWeightedMeans(Sensor57, nearbySensors , 2018-12-31 12:00:00, 2019-04-02 12:00:00) : 0

* There are no measurements during the period of time in measurements1.csv with sensors1.csv

nearbySensors = findNearbySensors(Sensor57, sensors, 4)

CalculateWeightedMeans(Sensor57, nearbySensors , 2019-04-02 12:00:00, 2020-01-01 12:00:00) : 0

calculateMarginError

* Correct margin error

calculateMarginError(45,50) : 0.1

* Margin error with a division by 0
* calculateMarginError(45,0) : null