

Code

Virek Pandjayan

```
① import org.apache.spark.sql.functions
② import org.joda.time.format.DateTimeFormat
③ Val inputPath = "C:/Users/virek/Downloads/premure.csv"
④ Val Premure = Sgl Context.read
    • format ("com.databricks.spark.csv")
    • option ("header", "true")
    • option ("delimiter", ",")
    • option ("inferSchema", "true")
    • load (inputPath)
⑤ Val temperature = Sgl Context.read
    • format ("com.databricks.spark.csv")
    • option ("header", "true")
    • option ("delimiter", ",")
    • option ("inferSchema", "true")
    • load (inputPath)
⑥ Val input dew: "C:/Users/virek/Downloads/dew.csv"
⑦ Val dew = Sgl Context.read
    • format ("com.databricks.spark.csv")
    • option ("header", "true")
    • option ("delimiter", ",")
    • option ("inferSchema", "true")
    • load (input dew)
⑧ Val input hmi = "C:/Users/virek/Downloads/humidity.csv"
⑨ Val humidity = Sgl Context.read
    • format ("com.databricks.spark.csv")
    • option ("header", "true")
    • option ("delimiter", ",")
    • option ("inferSchema", "true")
```

Virek Reddy

30

• load(inputPath)

31

Val inputWindDir = "c:\Users\Virek\Downloads\WindDirection.csv"

32

Val windDir = SqlContext.read

33

• format("com.databricks.Spark.com")

34

• format("header", "true")

35

• format("delimiter", ",")

36

• Option("inferSchema", "true")

• load(inputPath)

37

• load(inputWindDir)

38

Val inputWinds = "c:\Users\Virek\Downloads\WindSpeed.csv"

39

Val winds = SqlContext.read

40

• format("com.databricks.Spark.com")

41

• Option("header", "true")

42

• Option("delimiter", ",")

43

• Option("inferSchema", "true")

44

• load(inputWinds)

45

46

Val inputVis = "c:\Users\Virek\Downloads\Visibility.csv"

47

Val visibility = SqlContext.read

48

• format("com.databricks.Spark.com")

49

• Option("header", "true")

50

• Option("delimiter", ",")

51

• Option("inferSchema", "true")

52

• load(inputVis)

Vivek Pandey

```
(5) import matplotlib
(54) import matplotlib.pyplot as plt
(55) import StringIO
(56) import pandas as pd
(57) import seaborn as sns
(58) df = SqlContext.sql("Select Timestamp, Pressure from Pressure
(59) % pyspark. group by Timestamp")
(60) heatmap [0:100]
(61) from pyspark.sql import SQLContext
(62) ctf = SqlContext.table("Pressure")
(63) df.head()
(64) import os
(65) import pandas as pd
(66) list = []
(67) for row in glob.glob("c:/users/Vivek/downloads/pressure.csv")
(68) data = pd.read_csv(row)
(69) data.count()
(70) % pyspark
(71) df.show(1)
(72) img = StringIO.StringIO()
(73) p.savefig(img, format='svg')
(74) img.seek(0)
```

(76) Print " %html " + img.buf.

Vivek Parthasarathy

(77) `clt = SqlContext.sql("Select Pressure, timestamp,`
(78) `Month, count(*) as No of reading, Max(temperature),`
(79) `Min(temperature) from Pressure P inner join`
(80) `temperature T on P.timestamp = T.timestamp)`

(81) `Value = "Max temp"`

(82) `grouping = ["Month"]`

(83) `Val FineDay = List("01/01/2016", "01/16/2016",`
(84) `"01/20/2016", "02/21/2016",`
(85) `"03/07/2016", "03/07/2016")`

(86) `def Forest-Fine : (String Array [Double]) => {`

(87) `Value Values = Array(Day.to double, humidity.to double,`
(88) `Winds.to double, Temp.to double`
(89) `days from - max temp (year.to int,`
(90) `month.to int, day.to int)`

(91) `import java.io. -`

(92) `import org.joda.time. -`

(93) `import org.joda.time.format. -`

(94) `import org.joda.time.frame. DateTime format`

(95) `import org.joda.time. DateTime`

(96) `import org.joda.time. Days.`

(96) def get-date (year: Int, month: Int, day: Int) =

(97) " % 04d % 02d % 02d " . format (year, month, day)

(98) % sgl

(99) Select time stamp, temperature, pressure, humidity
wind speed, wind direction, visibility from
Forest fire geography table
order by time stamp.

(100)

(101)

(102) Select max (temperature), Month (timestamp) from
temperature group by Month (timestamp).
order by month (timestamp).

(103) % sgl.

(104) Select day (F.timestamp), day (T.timestamp),

(105) Max (F.temperature), Max (F.pressure),

(106) From temperature T join Forest Fire F
day (F.timestamp) = day (T.timestamp).

(107) % pySpark

(108) from pandas import Series, DataFrame.

(109) import pandas as pd.

(110) import numpy as np.

(111) dataframe (pressure).