
Program for Task2:

Task-2: Write a Spark job without using SQL to determine the average pressure at 9am (Pressure9am) for Launceston (location).

##Printing the question

```
>>> print("\033[1m" + "Task 2: Write a Spark job without using SQL to  
determine the average pressure at 9am (Pressure9am) for Launceston  
(location)" + "\033[0m")
```

Task 2: Write a Spark job without using SQL to determine the average pressure at 9am (Pressure9am) for Launceston (location)

Importing Packages

```
>>> import pyspark  
>>> from pyspark.sql import SparkSession  
>>> from pyspark.sql.functions import *  
>>> from pyspark.sql.types import *  
>>> import pyspark.sql.functions as func  
>>> from datetime import datetime
```

initializing sparksession object as session

```
>>> sparksession = SparkSession.builder.appName("Twitter-  
stream").master("local[*]").getOrCreate()
```

loading the data into dataframe

```
>>> dataframe = sparksession.read.csv("/user/common_data/  
Spark_Assignment_Dataset.csv",header = True, inferSchema =  
True,nullValue = "NA")
```

##Perform filter operation on data frame and Assigning the result to a variable "Avg_Pressure_9am"

```
>>> Avg_Pressure_9am = dataframe.filter("Location ==  
'Launceston']").agg(func.avg(func.col("Pressure9am")))
```

##Printing a sentence of task and resultant of Task2

```
>>> print(" Average Pressure at 9 am where location is Launceston is \n ")  
Average Pressure at 9 am where location is Launceston is
```

##Printing Output

```
>>> Avg_Pressure_9am.show(vertical = True)  
-RECORD 0-----  
avg(Pressure9am) | 1015.6792792792787
```