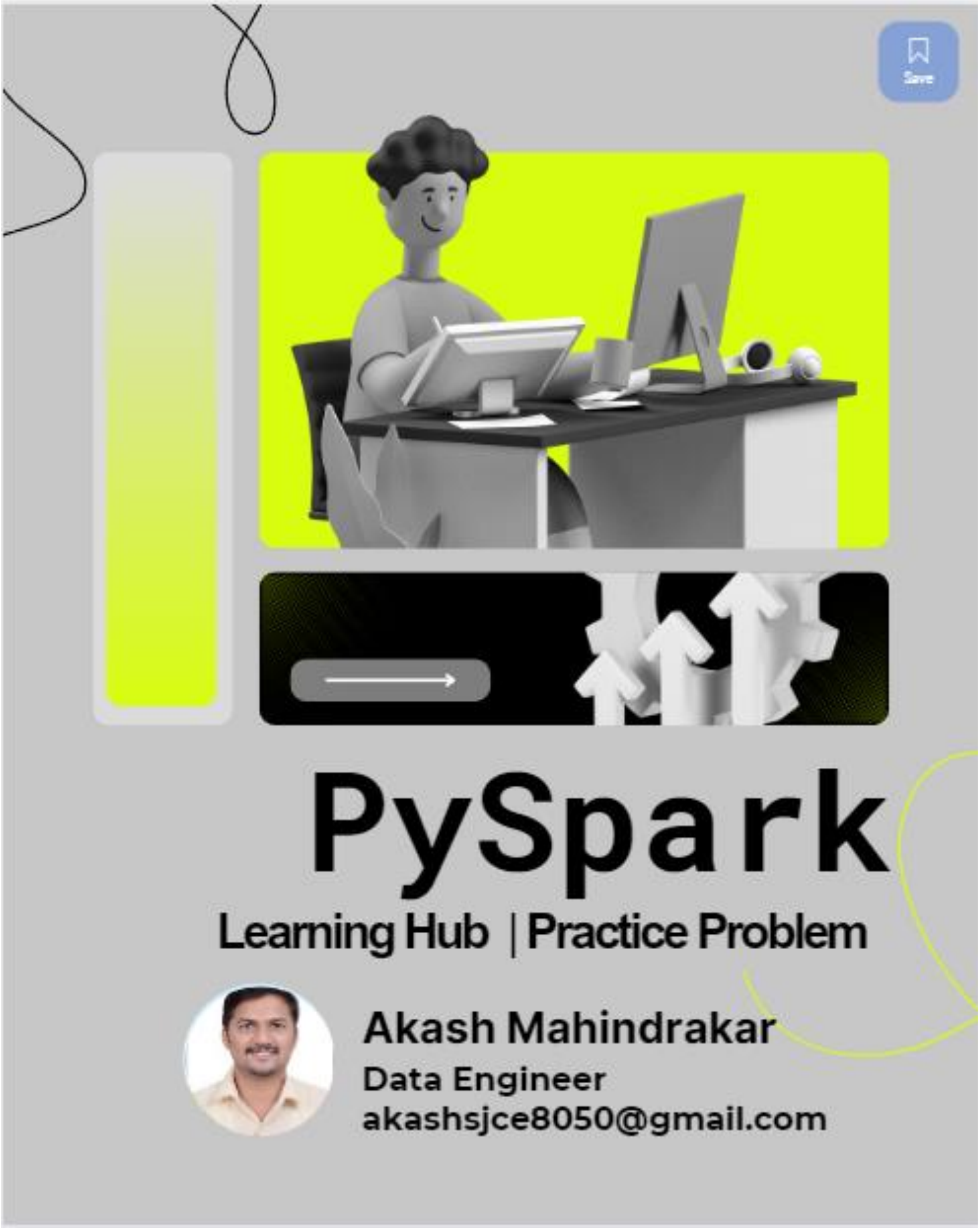
PYSPARK LEARNING HUB : DAY - 6



PySpark

Learning Hub | Practice Problem

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Step - 1 : Problem Statement

06_Customers Who Never Order

Write a Pyspark program to find all customers who never order anything.

Difficult Level : EASY

DataFrame:

```
# Define the schema for the "Customers"
customers_schema = StructType([
        StructField("id", IntegerType(), True),
        StructField("name", StringType(), True)
])

# Define data for the "Customers"
customers_data = [
        (1, 'Joe'),
        (2, 'Henry'),
        (3, 'Sam'),
        (4, 'Max')
]

# Define the schema for the "Orders"
orders_schema = StructType([
        StructField("id", IntegerType(), True),
        StructField("customerId", IntegerType(), True)
])

# Define data for the "Orders"
orders_data = [
        (1, 3),
        (2, 1)
]
```

Step - 2 : Identifying The Input Data And Expected Output

INPUT

INPUT -1 customers	
ID	NAME
1	Joe
2	Henry
3	Sam
4	Max

INPUT - 2 orders	
ID	CUSTOMERID
1	3
2	1

OUTPUT

OUTPUT
NAME
Max
Henry

Step - 3 : Writing the pyspark code to solve

```
# Creating Spark Session
from pyspark.sql import SparkSession
from pyspark.sql.types import
StructType,StructField,IntegerType,StringType

#creating spark session
spark = SparkSession. \
builder. \
config('spark.shuffle.useOldFetchProtocol', 'true'). \
config('spark.ui.port','0'). \
config("spark.sql.warehouse.dir", "/user/itv008042/warehouse"). \
enableHiveSupport(). \
master('yarn'). \
getOrCreate()

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```

```
# Define data for the "Orders"
orders_data = [
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]


# Create a PySpark DataFrame

cus_df=spark.createDataFrame(customers_data,customers_schema)
ord_df=spark.createDataFrame(orders_data,orders_schema)

cus_df.show()
ord_df.show()
```
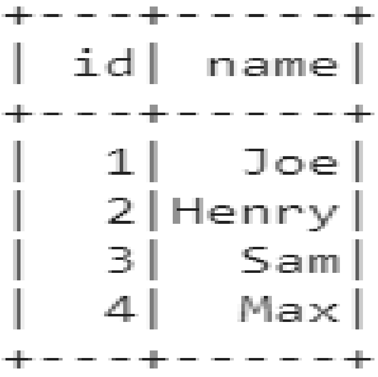
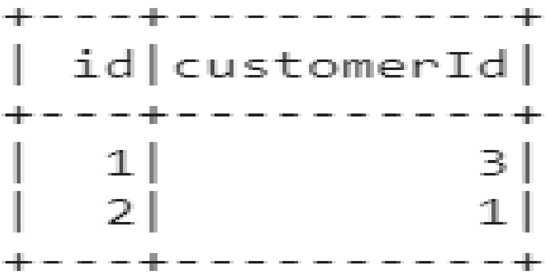
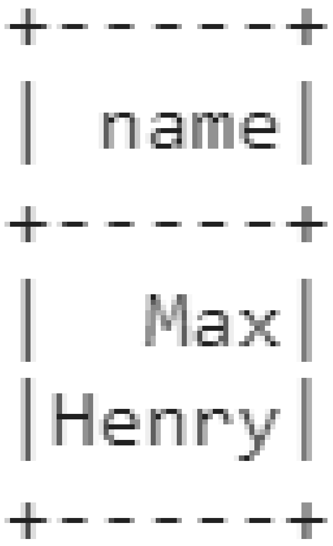



```
+---+------+
| id|  name|
+---+------+
|  1|   Joe|
|  2| Henry|
|  3|   Sam|
|  4|   Max|
+---+------+
```



```
+---+----------+
| id|customerId|
+---+----------+
|  1|         3|
|  2|         1|
+---+----------+
cus_df.join(ord_df,cus_df.id == ord_df.customerId,"left_anti")\
          .select("name").show()
```



```
+-----+
| name|
+-----+
|  Max|
|Henry|
+-----+
```

Was it helpful?

follow for more!

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