

```
In [1]: print('mukesh')
```

Starting Spark application

ID	YARN Application ID	Kind	State	Spark UI
0	application_1547533712041_0004	pyspark3	idle	Link (https://suyalmukesh.azurehdinsight.net/yarn/monitor/cluster/yarnapp/application_1547533712041_0004)

SparkSession available as 'spark'.
mukesh

```
In [2]: read_input_file = spark.read.csv("wasb:///data/movies.csv")
```

```
In [3]: read_input_file.printSchema()
read_input_file.show()
```

root

```
-- _c0: string (nullable = true)
-- _c1: string (nullable = true)
-- _c2: string (nullable = true)
```

```
+-----+-----+-----+
|  _c0|          _c1|          _c2|
+-----+-----+-----+
|movieId|          title|          genres| | |
|    1| Toy Story (1995)|Adventure|Animati...|
|    2|  Jumanji (1995)|Adventure|Childre...|
|    3|Grumpier Old Men ...|          Comedy|Romance|
|    4|Waiting to Exhale...|Comedy|Drama|Romance|
|    5|Father of the Bri...|          Comedy|
|    6|      Heat (1995)|Action|Crime|Thri...|
|    7|  Sabrina (1995)|          Comedy|Romance|
|    8| Tom and Huck (1995)|  Adventure|Children|
|    9| Sudden Death (1995)|          Action|
|   10|  GoldenEye (1995)|Action|Adventure|...|
|   11|American Presiden...|Comedy|Drama|Romance|
|   12|Dracula: Dead and...|          Comedy|Horror|
|   13|      Balto (1995)|Adventure|Animati...|
|   14|      Nixon (1995)|          Drama|
|   15|Cutthroat Island ...|Action|Adventure|...|
|   16|      Casino (1995)|          Crime|Drama|
|   17|Sense and Sensibi...|          Drama|Romance|
|   18|  Four Rooms (1995)|          Comedy|
|   19|Ace Ventura: When...|          Comedy|
+-----+-----+-----+
```

only showing top 20 rows

```
In [69]: from pyspark.sql.types import *
schema = StructType([StructField('movieId', IntegerType(), True),
                        StructField('Title', StringType(), True),
                        StructField('Genres', StringType(), True)])
read_file2 = spark.read.csv("wasb:///data/movies.csv", schema=schema)
#read_file2 = spark.read.csv("wasb:///data/movies.csv", inferSchema=True)
#Header = read_file2.first()
#read_file2.show(truncate=False)

read_file2.registerTempTable('movies')

#spark.sql("create table movies_new (movieId string, title string , genres string
#           stored as orc ")

#read_file2.show()
#spark.sql("select Title, Genres from movies").show()
#spark.sql("insert into movies_new select * from movies")
#spark.sql("select * from movies_new").show()
spark.sql("select count(*) from movies_new").show()
```

```
+-----+
|count(1)|
+-----+
|   58099|
+-----+
```

```
In [9]: from pyspark.sql import HiveContext
hc = HiveContext(sc)
read_input_file.write.format("orc").saveAsTable("employees")
```

```
In [19]: read_file2.show(truncate=False)
#spark.sql("select * from employees").show(truncate=False)
```

```
+-----+-----+-----+
|Name|DateTime|Age |
+-----+-----+-----+
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
|null|null    |null|
+-----+-----+-----+
only showing top 20 rows
```

```
In [13]: spark.sql("select count(*) from employees").show()
```

```
+-----+
|count(1)|
+-----+
|    58099|
+-----+
```

```
In [17]: spark.sql("select * from employees where _c2 like '%Action%'").show(truncate=False)
spark.sql("create view Action_movies as select * from employees where _c2 like '%Action%'")
spark.sql("select * from Action_movies").show(truncate=False)
```

```
+---+-----+-----+-----+-----+-----+
---+
|_c0|_c1                                     |_c2
|
+---+-----+-----+-----+-----+-----+
---+
|6  |Heat (1995)                             |Action|Crime|Thriller
|
|9  |Sudden Death (1995)                       |Action
|
|10 |GoldenEye (1995)                         |Action|Adventure|Thriller
|
|15 |Cutthroat Island (1995)                  |Action|Adventure|Romance
|
|20 |Money Train (1995)                       |Action|Comedy|Crime|Drama|Thriller
|
|23 |Assassins (1995)                         |Action|Crime|Thriller
|
|42 |Dead Presidents (1995)                  |Action|Crime|Drama
|
|44 |Mortal Kombat (1995)                     |Action|Adventure|Fantasy
|
|51 |Guardian Angel (1994)                    |Action|Drama|Thriller
|
|66 |Lawnmower Man 2: Beyond Cyberspace (1996)|Action|Sci-Fi|Thriller
|
|70 |From Dusk Till Dawn (1996)               |Action|Comedy|Horror|Thriller
|
|71 |Fair Game (1995)                         |Action
|
|76 |Screamers (1995)                         |Action|Sci-Fi|Thriller
|
|78 |Crossing Guard, The (1995)               |Action|Crime|Drama|Thriller
|
|86 |White Squall (1996)                      |Action|Adventure|Drama
|
|89 |Nick of Time (1995)                      |Action|Thriller
|
|95 |Broken Arrow (1996)                      |Action|Adventure|Thriller
|
|98 |Shopping (1994)                          |Action|Thriller
|
|110|Braveheart (1995)                        |Action|Drama|War
|
|112|Rumble in the Bronx (Hont faan kui) (1995)|Action|Adventure|Comedy|Crime
|
+---+-----+-----+-----+-----+-----+
---+
only showing top 20 rows

+---+-----+-----+-----+-----+-----+
---+
```

_c0	_c1	_c2
6	Heat (1995)	Action Crime Thriller
9	Sudden Death (1995)	Action
10	GoldenEye (1995)	Action Adventure Thriller
15	Cutthroat Island (1995)	Action Adventure Romance
20	Money Train (1995)	Action Comedy Crime Drama Thriller
23	Assassins (1995)	Action Crime Thriller
42	Dead Presidents (1995)	Action Crime Drama
44	Mortal Kombat (1995)	Action Adventure Fantasy
51	Guardian Angel (1994)	Action Drama Thriller
66	Lawnmower Man 2: Beyond Cyberspace (1996)	Action Sci-Fi Thriller
70	From Dusk Till Dawn (1996)	Action Comedy Horror Thriller
71	Fair Game (1995)	Action
76	Screamers (1995)	Action Sci-Fi Thriller
78	Crossing Guard, The (1995)	Action Crime Drama Thriller
86	White Squall (1996)	Action Adventure Drama
89	Nick of Time (1995)	Action Thriller
95	Broken Arrow (1996)	Action Adventure Thriller
98	Shopping (1994)	Action Thriller
110	Braveheart (1995)	Action Drama War
112	Rumble in the Bronx (Hont faan kui) (1995)	Action Adventure Comedy Crime

only showing top 20 rows

In []: