**scatterplot**

**from** mpl\_toolkits.mplot3d **import** Axes3D  
**from** pyspark.sql **import** SparkSession  
**from** pyspark.sql **import** SQLContext   
**import** seaborn **as** sns  
**import** matplotlib.pyplot **as** pltspark   
spark = SparkSession.builder.appName(**'SparkByExamples.com'**).getOrCreate()  
df6 = spark.read.csv(**'C:/test.csv'**, inferSchema=**True**, header=**True**)  
df6.show(26)  
  
df6.registerTempTable(**'TestTable'**)  
sqlContext = SQLContext(spark)*#Running Query*df6 = sqlContext.sql(**"SELECT pickup\_longitude,pickup\_latitude,dropoff\_longitude from TestTable"**).toPandas()  
fig = pltspark.figure()*#3d Scatter Plot*ax = pltspark.axes(projection=**'3d'**)  
ax.scatter(df6[**'pickup\_longitude'**], df6[**'pickup\_latitude'**], df6[**'dropoff\_longitude'**],color = **"green"**)  
ax.set\_title(**'pickup\_longitude Vs pickup\_latitude Vs dropoff\_longitude'**)  
pltspark.show()  
pltspark.savefig(**"scatterplot.png"**)

**Pie Chart**

*#Creating Table***import** pyspark   
**from** pyspark.sql **import** SparkSession  
**from** pyspark.sql **import** SQLContext   
**import** seaborn **as** sns  
**import** matplotlib.pyplot **as** pltspark   
spark = SparkSession.builder.appName(**'SparkByExamples.com'**).getOrCreate()  
df = spark.read.csv(**'C:/stud2.csv'**, inferSchema=**True**, header=**True**)  
df.show(26)  
  
df.registerTempTable(**'TestTable'**)  
sqlContext = SQLContext(spark)*#Running Query*df1 = sqlContext.sql(**"SELECT \* from TestTable"**).toPandas()  
df2 = sqlContext.sql(**"SELECT grades,GENDER from TestTable where grades > 20"**).toPandas()*#Creating Visualization*fig = pltspark.pie(df2[**'grades'**], autopct=**'%1.1f%%'**, startangle=140,labels=df2[**'GENDER'**])  
pltspark.title(**'Grouping records by Gender where grades is above 20'**)  
pltspark.show()  
pltspark.savefig(**"pie.png"**)

**Circle Chart**

**import** pyspark   
**from** pyspark.sql **import** SparkSession  
**from** pyspark.sql **import** SQLContext   
**import** seaborn **as** sns  
**import** matplotlib.pyplot **as** pltspark   
spark = SparkSession.builder.appName(**'SparkByExamples.com'**).getOrCreate()  
df6 = spark.read.csv(**'C:/stud2.csv'**, inferSchema=**True**, header=**True**)  
df6.show(26)  
df6.registerTempTable(**'TestTable'**)  
sqlContext = SQLContext(spark)*#Running Query*df6 = sqlContext.sql(**"SELECT grades,COURSE from TestTable "**).toPandas()  
pltspark.pie(df6[**'grades'**], autopct=**'%1.1f%%'**, startangle=140,labels=df6[**'COURSE'**])  
fig = pltspark.Circle(xy=(0,0),radius=.75,facecolor=**'white'**)  
pltspark.gca().add\_artist(fig)  
pltspark.title(**'Circle Chart'**)  
pltspark.legend(loc=**'upper right'**)  
pltspark.show()  
pltspark.savefig(**"circle.png"**)