**import** **pandas** **as** **pd**

**from** **scipy.stats** **import** pearsonr

**import** **matplotlib.pyplot** **as** **plt**

In [2]:

df = pd.read\_csv('general\_data.csv').dropna()

In [3]:

df.head()

df["Attrition"].replace(to\_replace = ("No","Yes"),value =(0,1),inplace=**True**)

In [6]:

df["BusinessTravel"].replace(to\_replace = ("Non-Travel","Travel\_Rarely","Travel\_Frequently"),value = (0,1,2),inplace=**True**)

**Correlation between Attrition and Age**

In [16]:

stats,p = pearsonr(df.Attrition,df.Age)

print(stats,p)

-0.1583986795409615 5.126598219399243e-26

**Correlation between Attrition and MonthlyIncome**

In [21]:

stats,p = pearsonr(df.Attrition,df.MonthlyIncome)

print(stats,p)

-0.030160293808459582 0.04589086274474114

**Correlation between Attrition and BusinessTravel**

In [24]:

stats,p =pearsonr(df.Attrition,df.BusinessTravel)

stats,p

Out[24]:

(0.12530593310428723, 8.411436982074981e-17)

**Correlation between Attrition and NumCompaniesWorked**

In [35]:

stats,p =pearsonr(df.Attrition,df.NumCompaniesWorked)

stats,p

Out[35]:

(0.04283056724471892, 0.004572057121624155)

**Correlation between Attrition and PercentSalaryHike**

In [36]:

stats,p =pearsonr(df.Attrition,df.PercentSalaryHike)

stats,p

Out[36]:

(0.033153037135465226, 0.028192446935107012)

**Correlation between Attrition and TrainingTimesLastYear**

In [37]:

stats,p =pearsonr(df.Attrition,df.TrainingTimesLastYear)

stats,p

Out[37]:

(-0.04758573693081555, 0.0016276603635485554)

**Correlation between Attrition and YearsAtCompany**

In [38]:

stats,p =pearsonr(df.Attrition,df.YearsAtCompany)

stats,p

Out[38]:

(-0.1330026184252109, 9.476118084864852e-19)

**Correlation between Attrition and YearsSinceLastPromotion**

In [39]:

stats,p =pearsonr(df.Attrition,df.YearsSinceLastPromotion)

stats,p

Out[39]:

(-0.0314231505633079, 0.03752293607393637)

**Correlation between Attrition and YearsWithCurrManager**

In [40]:

stats,p =pearsonr(df.Attrition,df.YearsWithCurrManager)

stats,p

Out[40]:

(-0.15469153690286805, 7.105369646794048e-25)

**Correlation between Attrition and DistanceFromHome**

In [43]:

stats,p =pearsonr(df.Attrition,df.DistanceFromHome)

stats,p

Out[43]:

(-0.009448638515155983, 0.5317715668019634)

In [ ]: