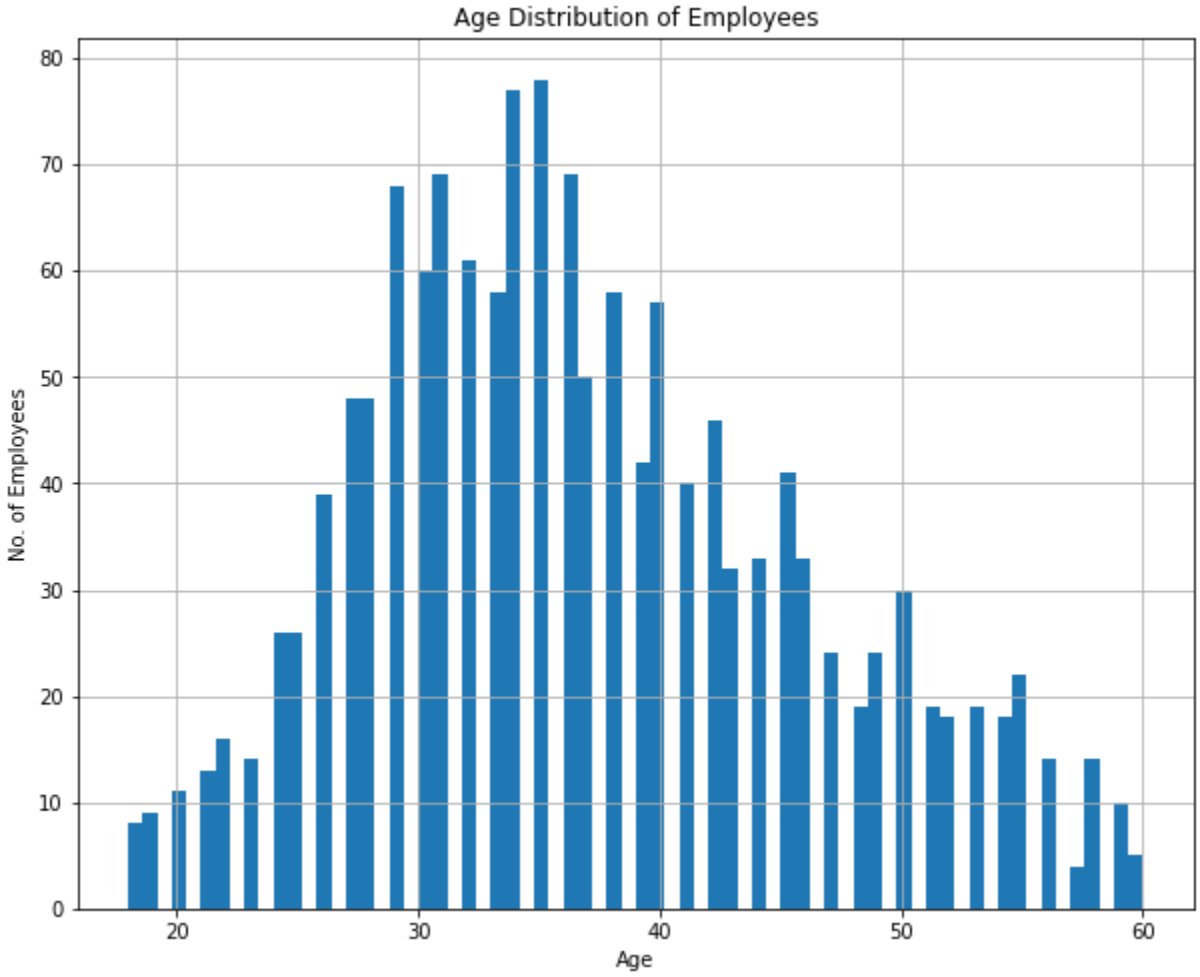
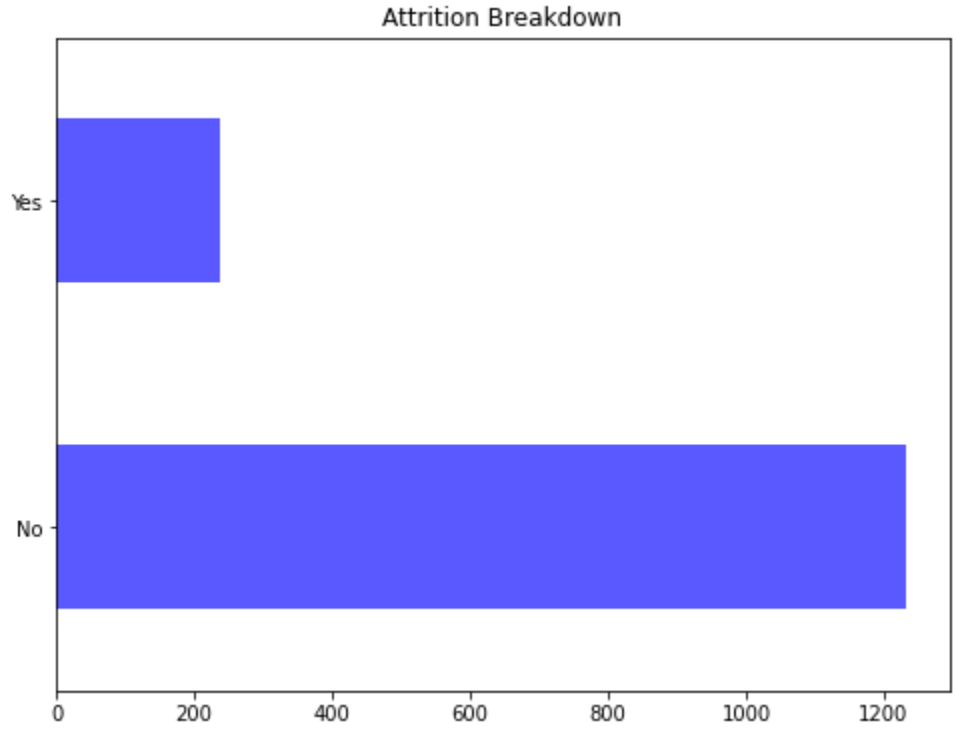
Screenshots

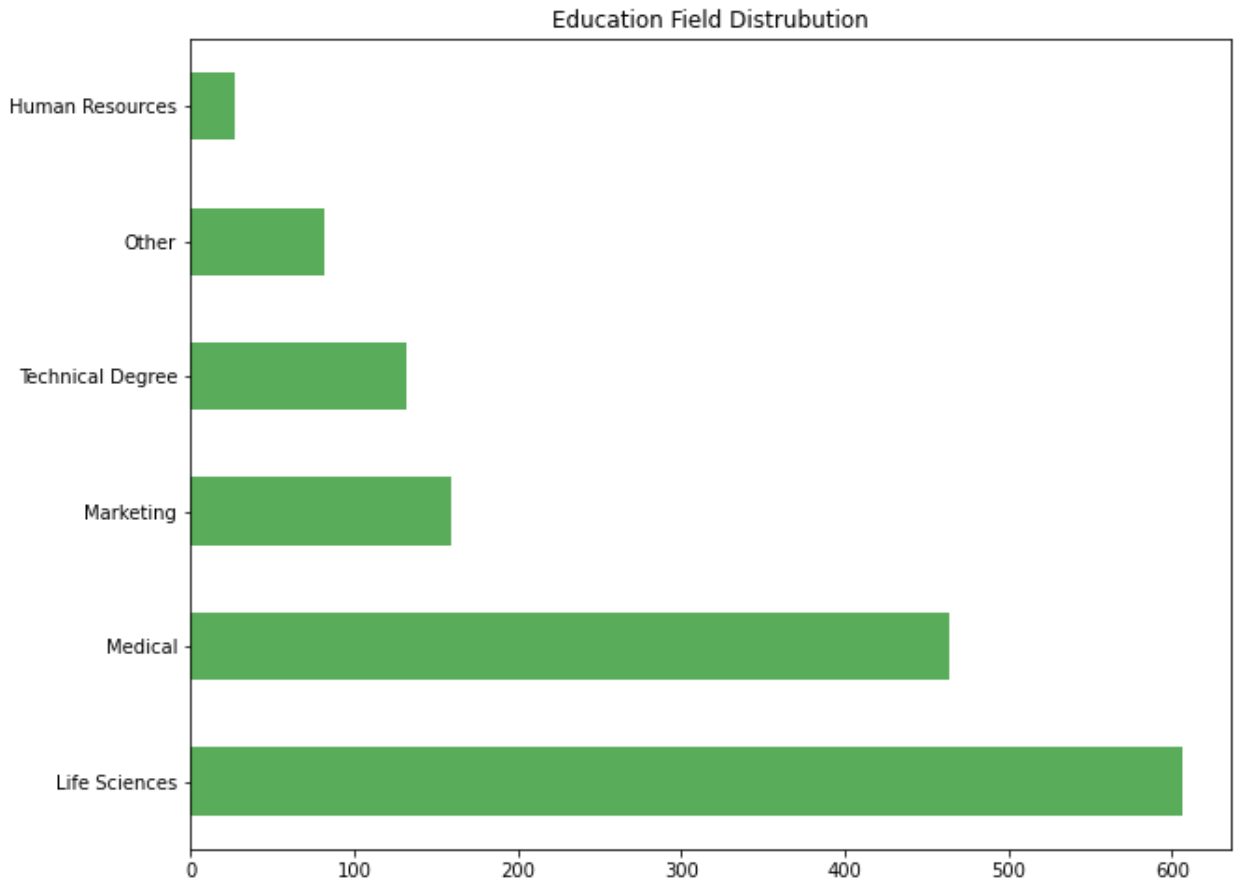
	Age	Attrition	Department	DistanceFromHome	Education	EducationField	EnvironmentSatisfaction	JobSatisfaction	MaritalStatus	MonthlyIncome	NumCompaniesWorked	WorkLifeBalance	YearsAtCompany
0	41	Yes	Sales	1	2	Life Sciences	2	4	Single	5993	8	1	6
1	49	No	Research & Development	8	1	Life Sciences	3	2	Married	5130	1	3	10
2	37	Yes	Research & Development	2	2	Other	4	3	Single	2090	6	3	0
3	33	No	Research & Development	3	4	Life Sciences	4	3	Married	2909	1	3	8
4	27	No	Research & Development	2	1	Medical	1	2	Married	3468	9	3	2

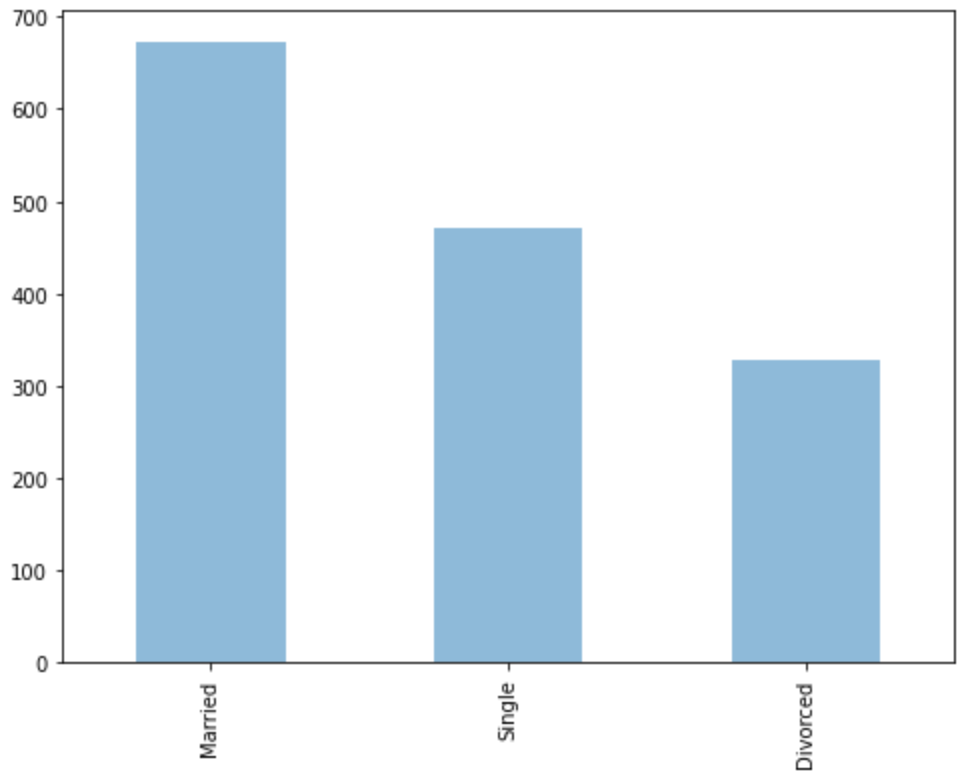
```
['Age' 'Attrition' 'Department' 'DistanceFromHome' 'Education'
 'EducationField' 'EnvironmentSatisfaction' 'JobSatisfaction'
 'MaritalStatus' 'MonthlyIncome' 'NumCompaniesWorked' 'WorkLifeBalance'
 'YearsAtCompany']
```




Attrition by Age
Age
60
50
40
30
20
Yes
No


Attrition Breakdown
Yes
No
0
200
400
600
800
1000
1200


Education Field Distrubution
Human Resources
Other
Technical Degree
Marketing
Medical
Life Sciences
0
100
200
300
400
500
600



	Age	DistanceFromHome	Education	EnvironmentSatisfaction	JobSatisfaction	MonthlyIncome	NumCompaniesWorked	WorkLifeBalance	YearsAtCompany
count	1470.000000	1470.000000	1470.000000	1470.000000	1470.000000	1470.000000	1470.000000	1470.000000	1470.000000
mean	36.923810	9.192517	2.912925	2.721769	2.728571	6502.931293	2.693197	2.761224	7.008163
std	9.135373	8.106864	1.024165	1.093082	1.102846	4707.956783	2.498009	0.706476	6.126525
min	18.000000	1.000000	1.000000	1.000000	1.000000	1009.000000	0.000000	1.000000	0.000000
25%	30.000000	2.000000	2.000000	2.000000	2.000000	2911.000000	1.000000	2.000000	3.000000
50%	36.000000	7.000000	3.000000	3.000000	3.000000	4919.000000	2.000000	3.000000	5.000000
75%	43.000000	14.000000	4.000000	4.000000	4.000000	8379.000000	4.000000	3.000000	9.000000
max	60.000000	29.000000	5.000000	4.000000	4.000000	19999.000000	9.000000	4.000000	40.000000

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1470 entries, 0 to 1469
Data columns (total 13 columns):
 #   Column                    Non-Null Count  Dtype
---  ------                    --------------  -----
 0   Age                       1470 non-null   int64
 1   Attrition                 1470 non-null   object
 2   Department                1470 non-null   object
 3   DistanceFromHome          1470 non-null   int64
 4   Education                 1470 non-null   int64
 5   EducationField            1470 non-null   object
 6   EnvironmentSatisfaction   1470 non-null   int64
 7   JobSatisfaction           1470 non-null   int64
 8   MaritalStatus             1470 non-null   object
 9   MonthlyIncome             1470 non-null   int64
 10  NumCompaniesWorked        1470 non-null   int64
 11  WorkLifeBalance           1470 non-null   int64
 12  YearsAtCompany            1470 non-null   int64
dtypes: int64(9), object(4)
memory usage: 149.4+ KB
```

	Age	Attrition	Department	DistanceFromHome	Education	EducationField	EnvironmentSatisfaction	JobSatisfaction	MaritalStatus	MonthlyIncome	NumCompaniesWorked	WorkLifeBalance	YearsAtCompany
0	41	1	2	1	2	1	2	4	2	5993	8	1	6
1	49	0	1	8	1	1	3	2	1	5130	1	3	10
2	37	1	1	2	2	5	4	3	2	2090	6	3	0
3	33	0	1	3	4	1	4	3	1	2909	1	3	8
4	27	0	1	2	1	2	1	2	1	3468	9	3	2

```
[ ]  #Confusion Matrix
     print("Confusion Matrix:\n", confusion_matrix(y_test, pred))
```

```
     Confusion Matrix:
      [[371   0]
      [ 70   0]]
```

```
[ ]  #Classification Report
     print("Classification Report:\n", classification_report(y_test, pred))
```

```
     Classification REport:
                   precision    recall  f1-score   support

              0.0       0.84      1.00      0.91       371
              1.0       0.00      0.00      0.00        70

         accuracy                           0.84       441
        macro avg       0.42      0.50      0.46       441
     weighted avg       0.71      0.84      0.77       441
```