

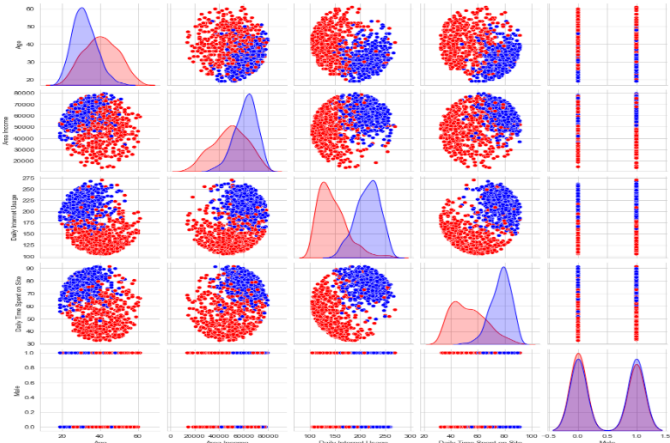
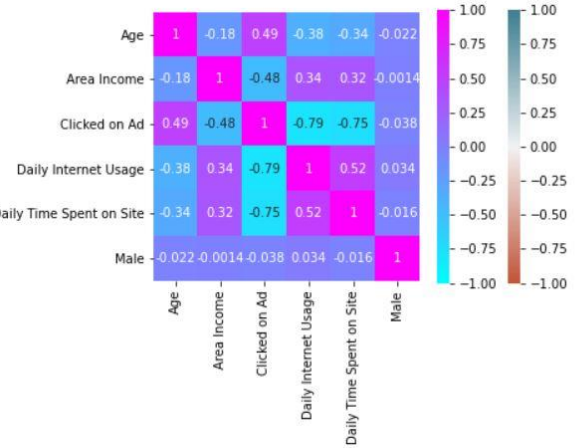
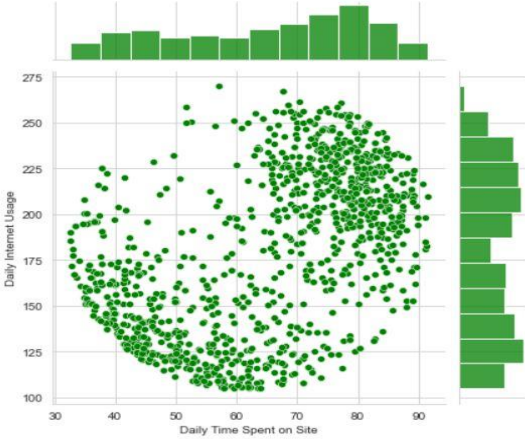
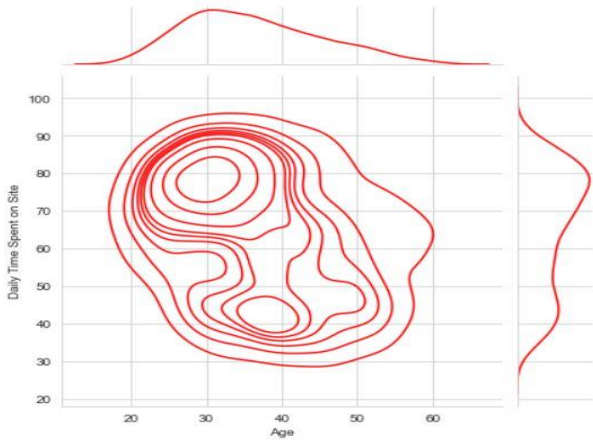
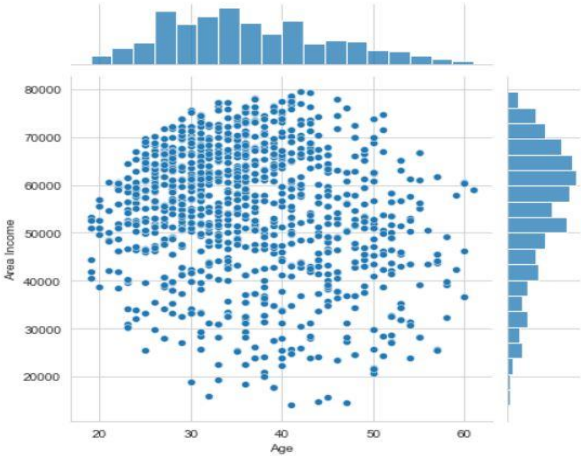
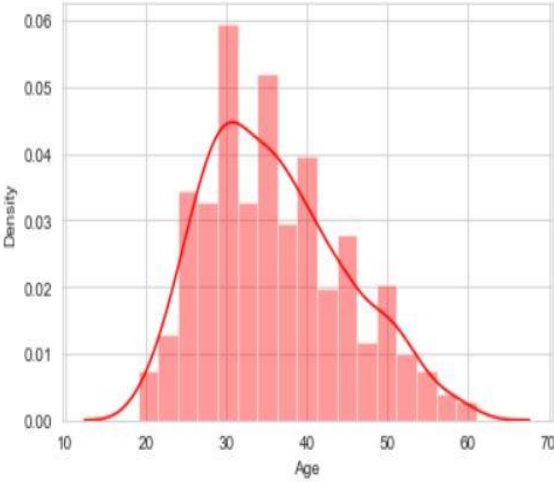
**Introduction:**

- ❖ We have two datasets called Advertising Train and Advertising Test with 1000 and 200 observation respectively.
- ❖ Concatenated to Ad\_data, which contains 1200 observation and 10 columns.
- ❖ Excluded some variables because their analysis is not useful for our objective.
- ❖ Goal is to predict the whether or not a particular internet user clicked on an Advertisement on a company website.
- ❖ Presentation using Jupyter NoteBook

**Dataset Attributes:**

```
ad_data.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1200 entries, 0 to 1199
Data columns (total 11 columns):
#   Column              Non-Null Count  Dtype
---  ---             
0   Ad Topic Line        1200 non-null   object
1   Age                  1200 non-null   int64
2   Area Income          1200 non-null   float64
3   City                 1200 non-null   object
4   Clicked on Ad        1000 non-null   float64
5   Country              1200 non-null   object
6   Daily Internet Usage  1200 non-null   float64
7   Daily Time Spent on Site  1200 non-null  float64
8   Male                 1200 non-null   int64
9   Timestamp            1200 non-null   object
10  source               1200 non-null   object
dtypes: float64(4), int64(2), object(5)
memory usage: 103.2+ KB
```



**Conclusion:**

- ❖ During our analysis, we noticed that most of the Advertisements are clicked by Internet users who are between 25 – 45
- ❖ Most the internet user who clicked the advertisements were females approximately 55%
- ❖ We have built five different model whose accuracy score are as follows:

Logistic Regressions	:	97%
K Nearest Neighbors	:	66%
Random Forest	:	95%
SVM	:	96.33%
Decision Tree	:	92%
- ❖ We conclude that the Logistic Regression is the best model followed by SVM.

