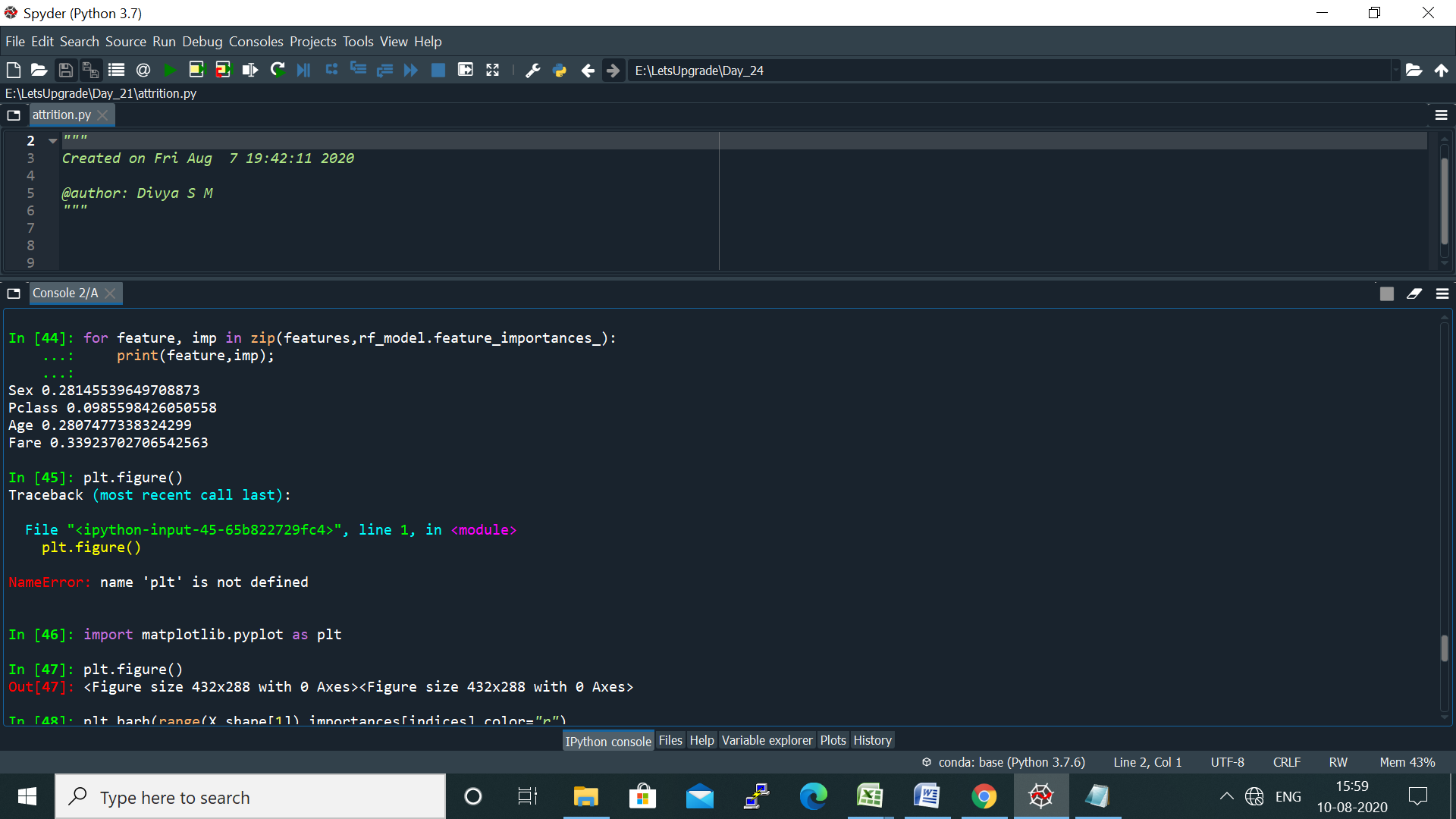
# Decision Tree Assignment

## Project 1: *Build Decision Tree(DV-"Survived",IDV-"Age,Gender and Fare") and Predict it.*

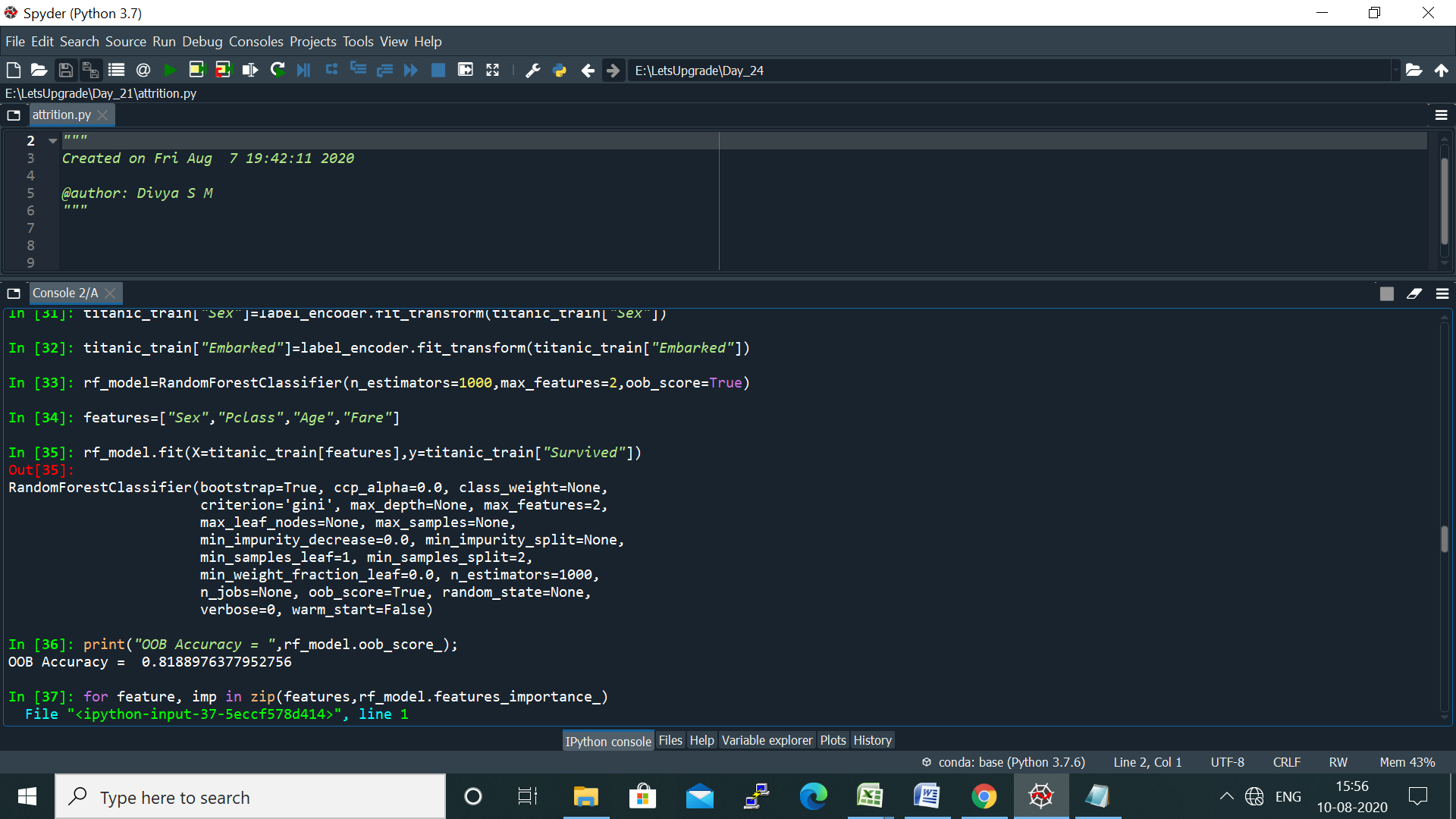
* **Finding the Important features using Random Forest algorithm:**

The important features are:

* Gender
* Age
* Fare

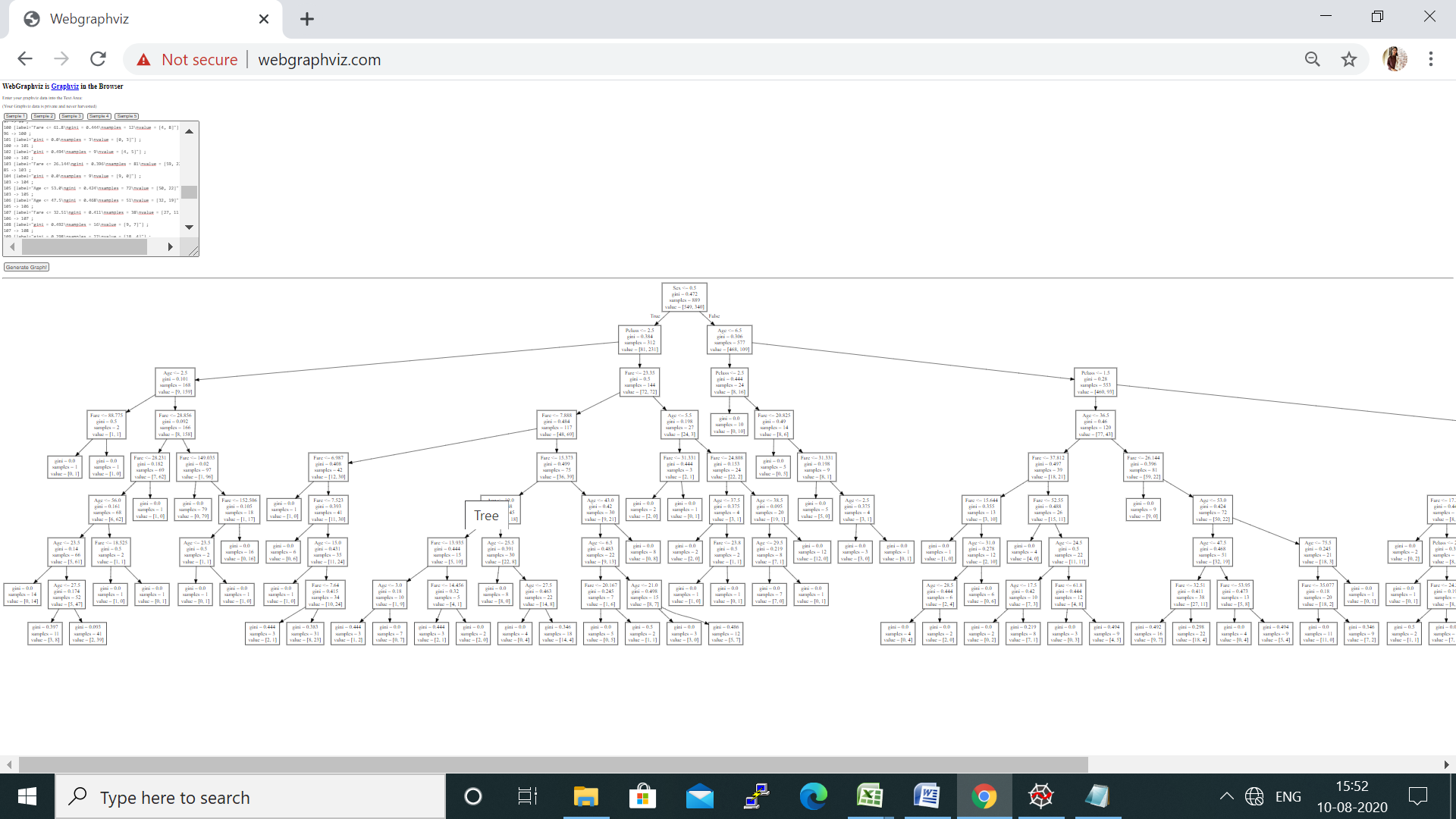


* **Finding the accuracy of the model:**



OOB Accuracy value is 0.8188 which is approx. 82% is the model accuracy.

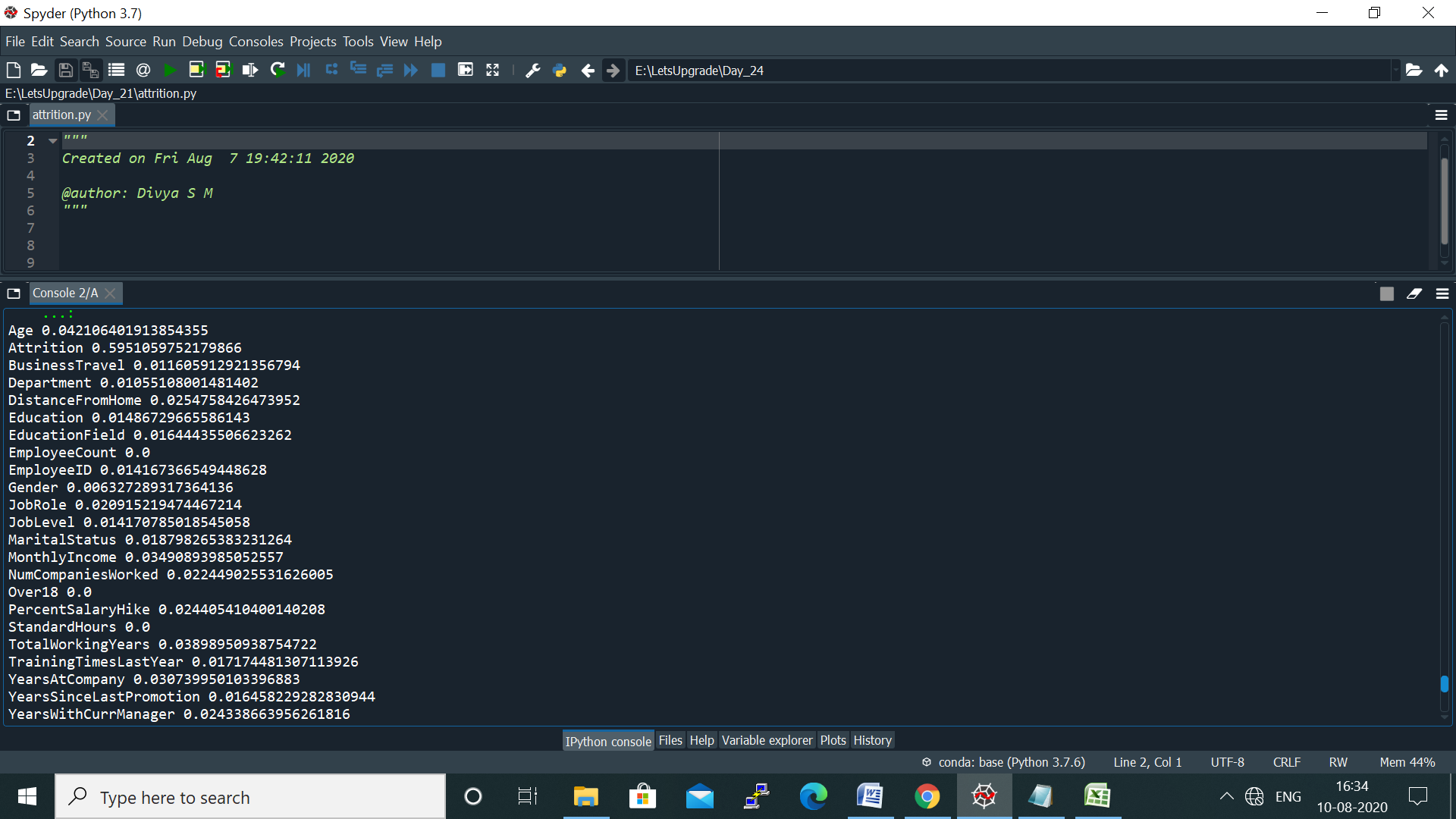
* **Decision Tree for the model:**



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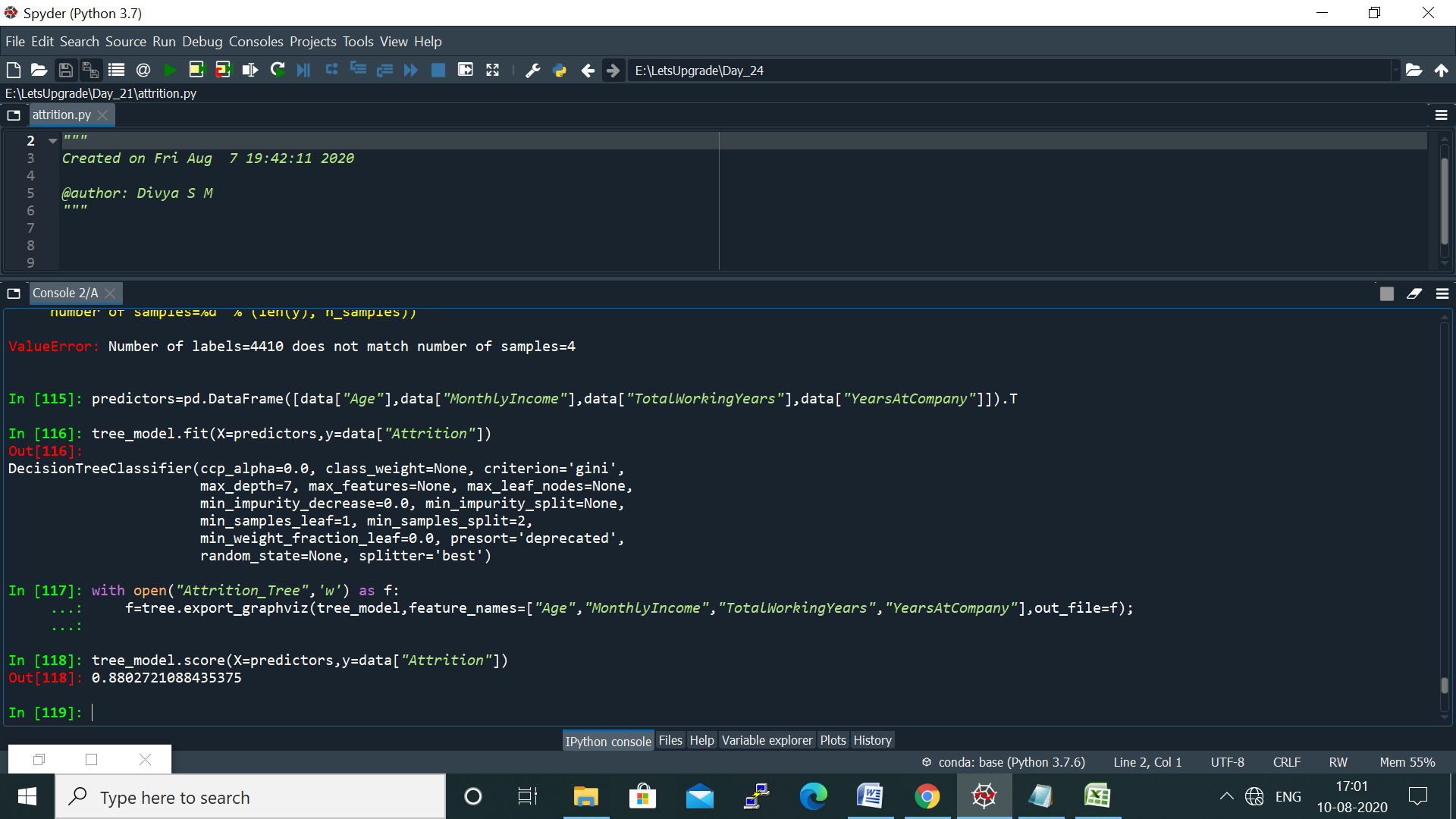
## Project 2: *Build Decision Tree for Attrition Rate Analysis*

* **Finding the Important features using Random Forest algorithm :**



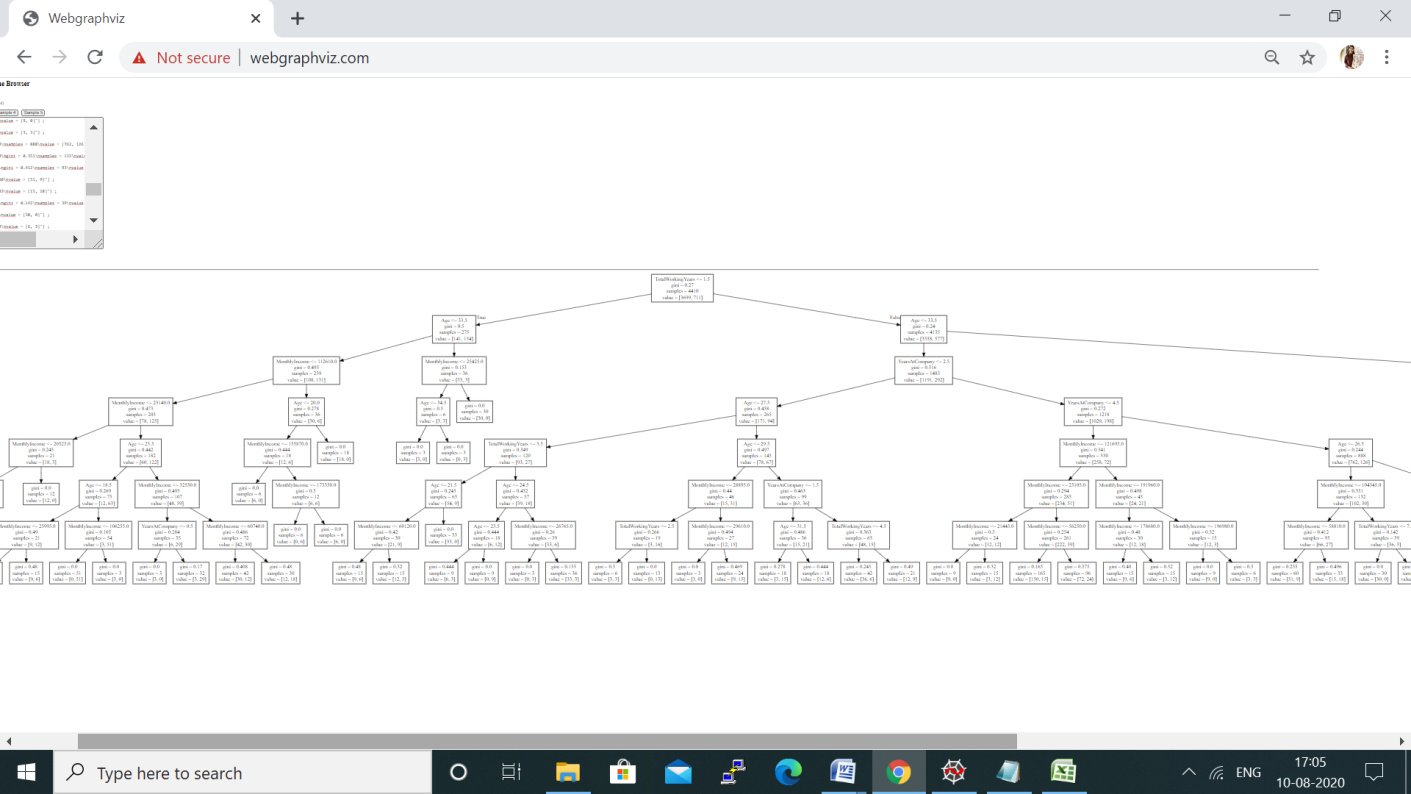
Important features are:

* Age
* Monthly Income
* Total Working Years
* Years At Company
* **Model Accuracy:**



The model is 88% accurate.

* **Decision Tree for the Model:**



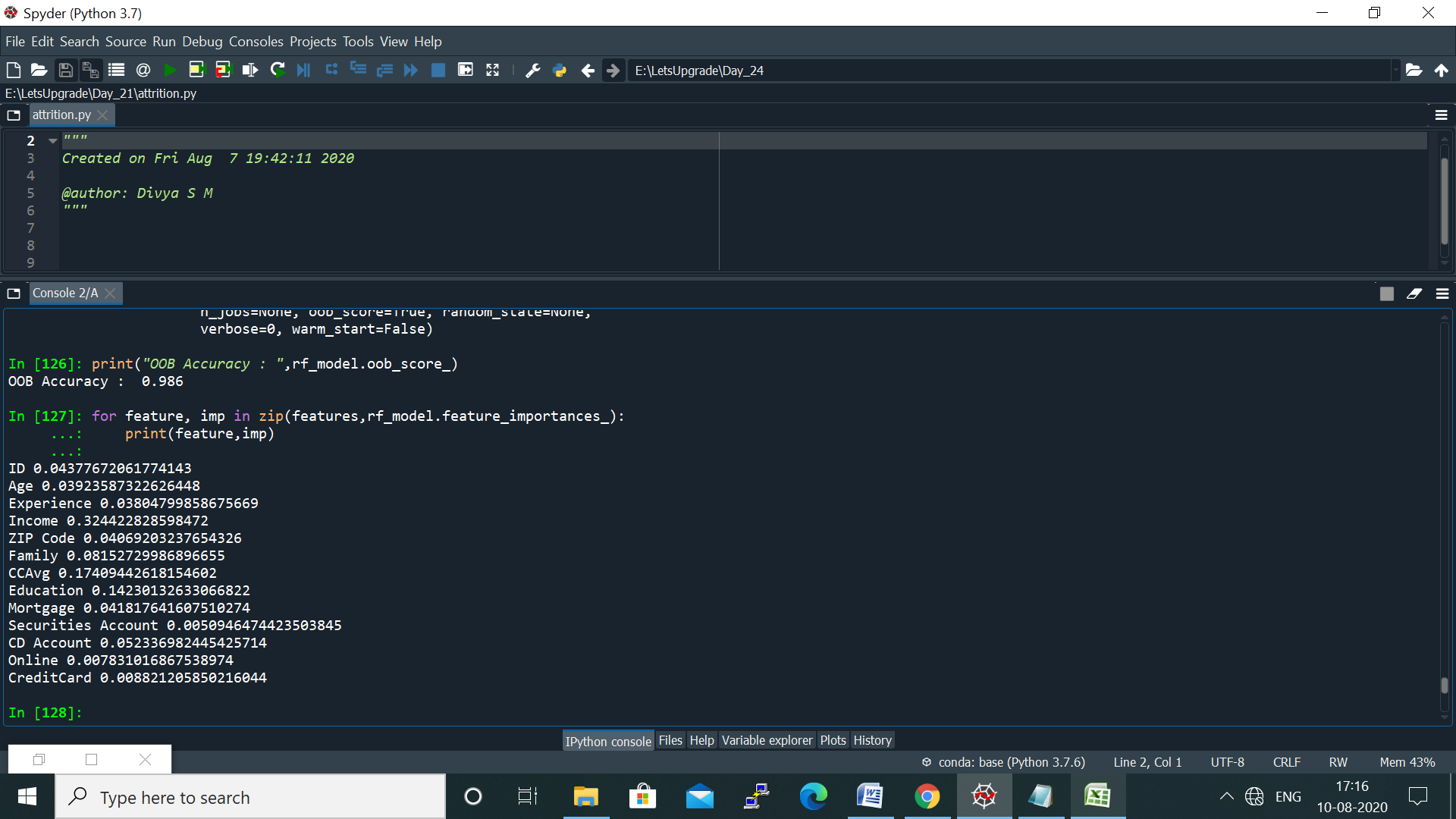
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## Project 3: Build Decision Tree for Bank Loan Modeling

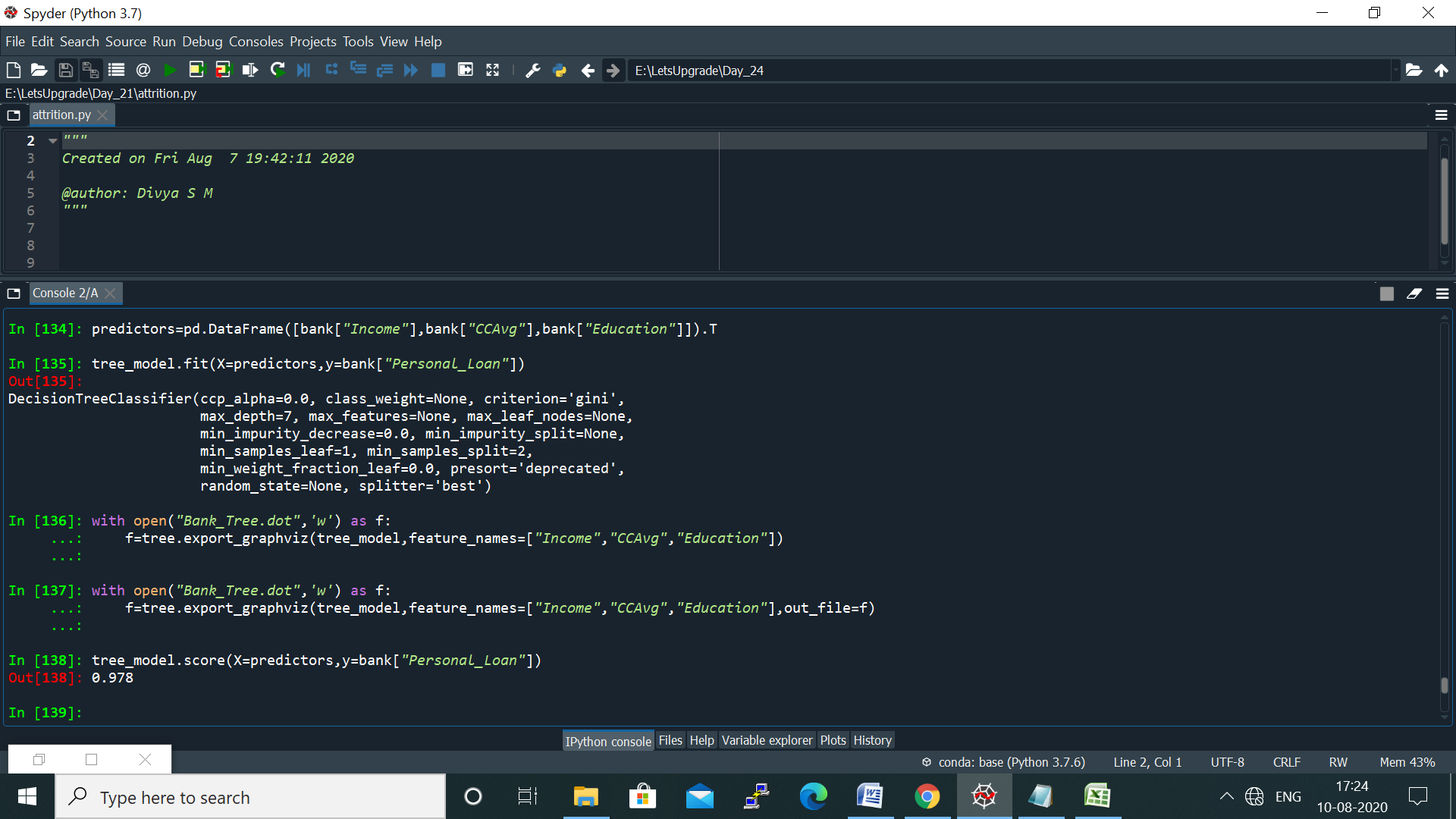
* **Finding the Important features using Random Forest algorithm :**

The important features are:

* Income
* CCAvg
* Income



* **Model Accuracy:**



The model is 97.8% accurate.

* **Decision Tree for the model:**

