

## Income Qualification Project Write-up

- **Identify the output variable.**  
Output is the Target Variable which is ordinal and indicates the poverty levels
- **appreciate the type of data.**  
There are three data types involved. Int, float and object.
- **Check if there are any biases in your dataset.**  
Yes there is bias. Extreme poverty is the smallest.
- **Check whether all members of the house have the same poverty level.**  
No, since there were households where target variable is not same for all the family members in the household.
- **Check if there is a house without a family head.**  
There are houses without a family head
- **Set poverty level of the members and the head of the house within a family.**  
Please refer to Screenshots or Source code
- **Count how many null values are existing in columns.**  
Below is the column wise count of Null Values.

```
v2a1    6860
v18q1    7342
rez_esc  7928
meanneduc    5
SQBmeaned    5
```
- **Remove null value rows of the target variable.**  
Please refer to Screenshots or Source code
- **Predict the accuracy using random forest classifier.**  

```
0.9267782426778243
```
- **Check the accuracy using random forest with cross validation.**  

```
94.60081361157272
```