

# Census Data

# Data Summary

- Dataset from Kaggle collects demographic information from the US Census such as age, race, gender and income bracket

Age		Work.Sector		Number.of.people.this.represents		Education	
Min.	:17.00	Private	:22696	Min.	: 12285	HS-grad	:10501
1st Qu.:	28.00	Self-emp-not-inc:	2541	1st Qu.:	117832	Some-college:	7291
Median	:37.00	Local-gov	: 2093	Median	: 178363	Bachelors	: 5354
Mean	:38.58	?	: 1836	Mean	: 189782	Masters	: 1723
3rd Qu.:	48.00	State-gov	: 1297	3rd Qu.:	237054	Assoc-voc	: 1382
Max.	:90.00	Self-emp-inc	: 1116	Max.	:1484705	11th	: 1175
		(Other)	: 981			(Other)	: 5134

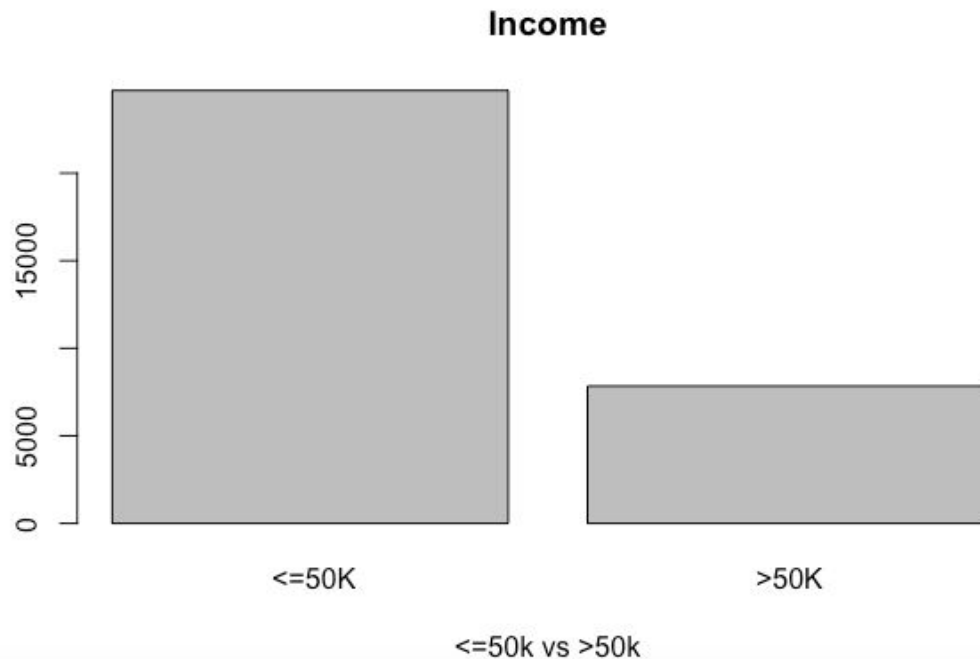
Education.number		Marital.Status		Occupation		Family.Status	
Min.	: 1.00	Divorced	: 4443	Prof-specialty	: 4140	Husband	: 13193
1st Qu.:	9.00	Married-AF-spouse	: 23	Craft-repair	: 4099	Not-in-family	: 8304
Median	: 10.00	Married-civ-spouse	: 14976	Exec-managerial	: 4066	Other-relative	: 981
Mean	: 10.08	Married-spouse-absent	: 418	Adm-clerical	: 3769	Own-child	: 5068
3rd Qu.:	12.00	Never-married	: 10682	Sales	: 3650	Unmarried	: 3446
Max.	: 16.00	Separated	: 1025	Other-service	: 3295	Wife	: 1568
		Widowed	: 993	(Other)	: 9541		

Race	Gender	Captial.Gain	Captial.Loss	Hours.Worked.Week
Amer-Indian-Eskimo: 311	Female:10771	Min. : 0	Min. : 0.00	Min. : 1.00
Asian-Pac-Islander: 1039	Male :21789	1st Qu.: 0	1st Qu.: 0.00	1st Qu.:40.00
Black : 3124		Median : 0	Median : 0.00	Median :40.00
Other : 271		Mean : 1078	Mean : 87.31	Mean :40.44
White :27815		3rd Qu.: 0	3rd Qu.: 0.00	3rd Qu.:45.00
		Max. :99999	Max. :4356.00	Max. :99.00

Country.of.Origin	Income
United-States:29169	<=50K:24719
Mexico : 643	>50K : 7841
? : 583	
Philippines : 198	
Germany : 137	
Canada : 121	
(Other) : 1709	

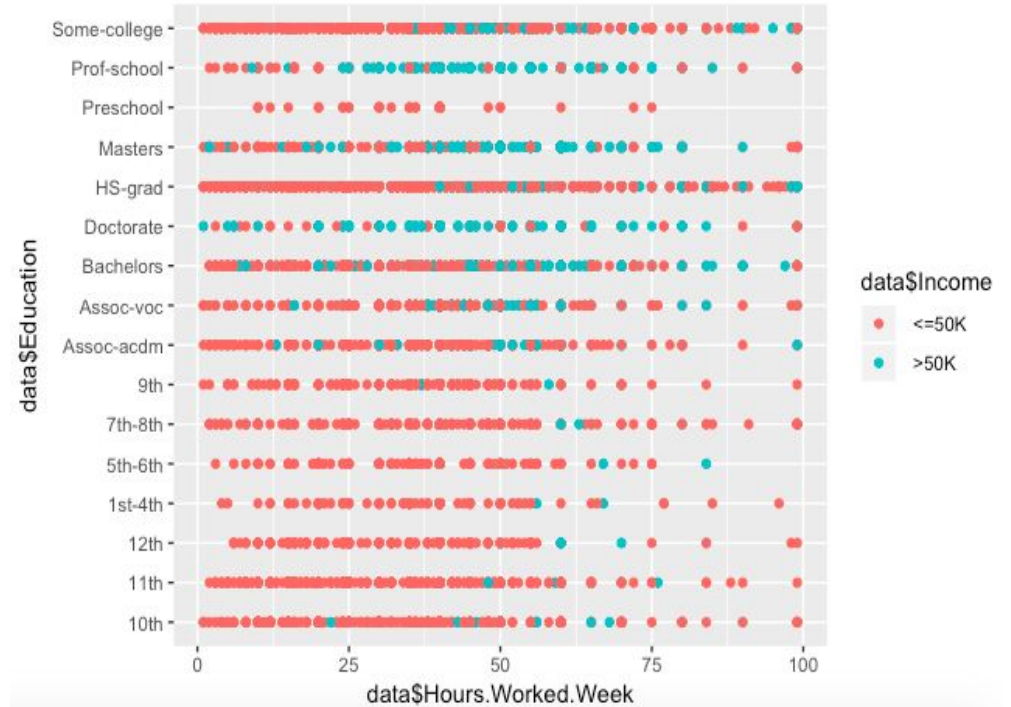
# Income Distribution

- About  $\frac{3}{4}$  of people are making less than 50k
- About  $\frac{1}{4}$  of people are making more than 50k



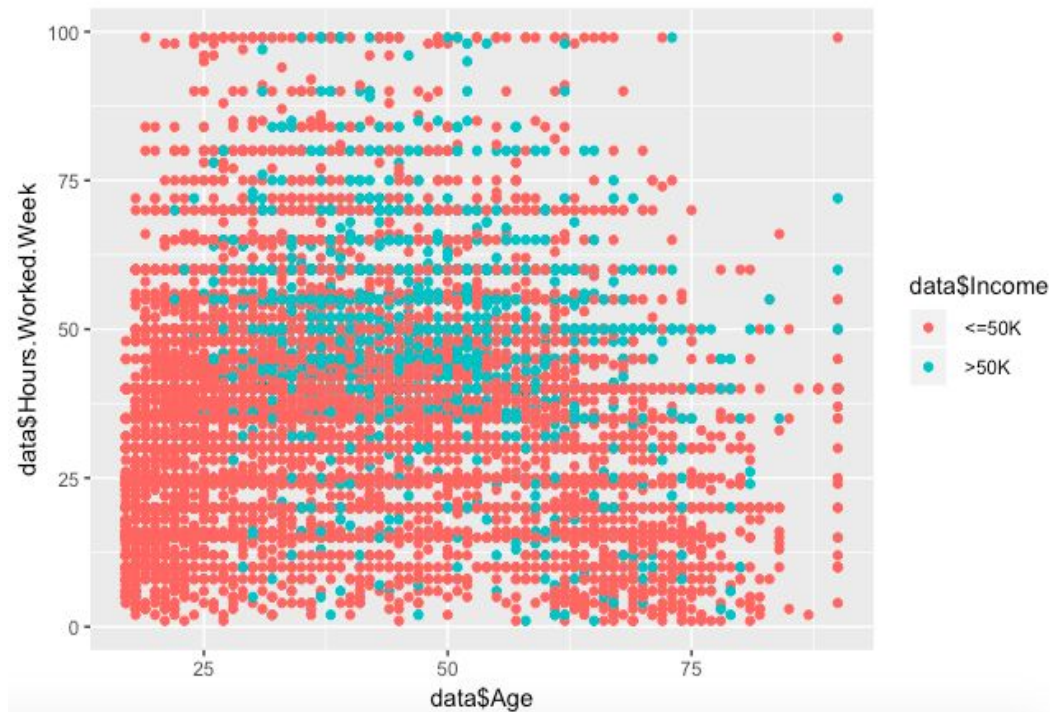
# Income related to Education and Hours worked per week

- People with Bachelors, Masters, Professional school and Doctorates make up the majority of people making over 50k
- The greater the person's education, the more money the person makes



# Income related to Age and Hours worked per week

- This data shows most people making over 50k work around 50 hours a week and are generally middle aged

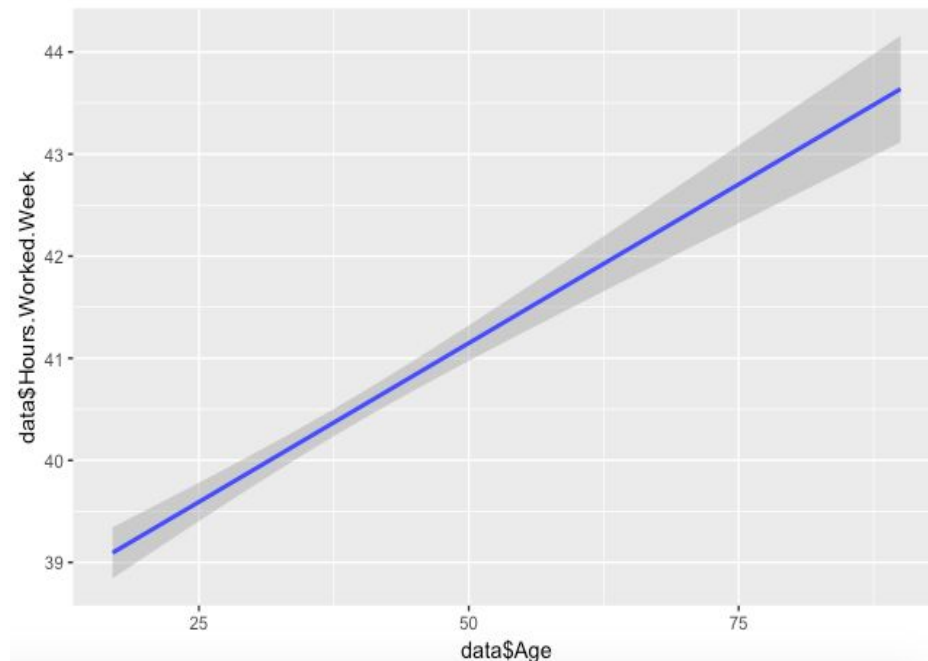


# Hours worked per week depending on age

- In general people work more as they get older contrary to what people think

## Welch Two Sample t-test

```
data: data$Age and data$Hours.Worked.Week  
t = -18.2, df = 64483, p-value < 2.2e-16  
alternative hypothesis: true difference in means is not equal to 0  
95 percent confidence interval:  
-2.055690 -1.655981  
sample estimates:  
mean of x mean of y  
38.58163 40.43747
```



# Hours worked based on income

- People making more than 50k typically worked around 49 hours at the start of their careers while people making less were working around 38 hours but as they got to retirement age the people making less than 50k tended to work more than those making more

