

Pair Assignment 1

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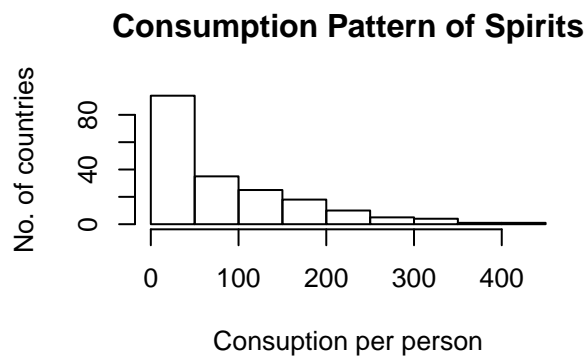
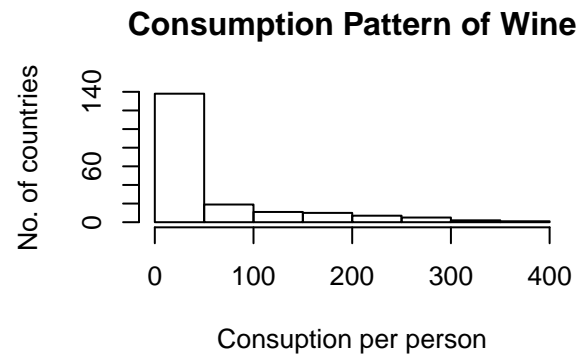
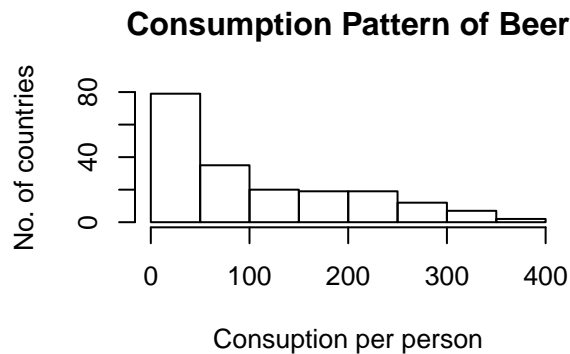
Exercise 1 - Alcohol Consumption across the World

This exercise deals with the analysis of data on consumption of alcohol per person across the world. The analysis has been performed on data provided by the World Health Organisation, Global Information System on Alcohol and Health (GISAH), 2010)

According to the data, beer was the drink of choice in 2010. The average consumption (per person in units of serving) of different forms of alcohol - beer, wine and spirits - was:

```
## beer_servings  106
## spirit_servings  81
## wine_servings  49
```

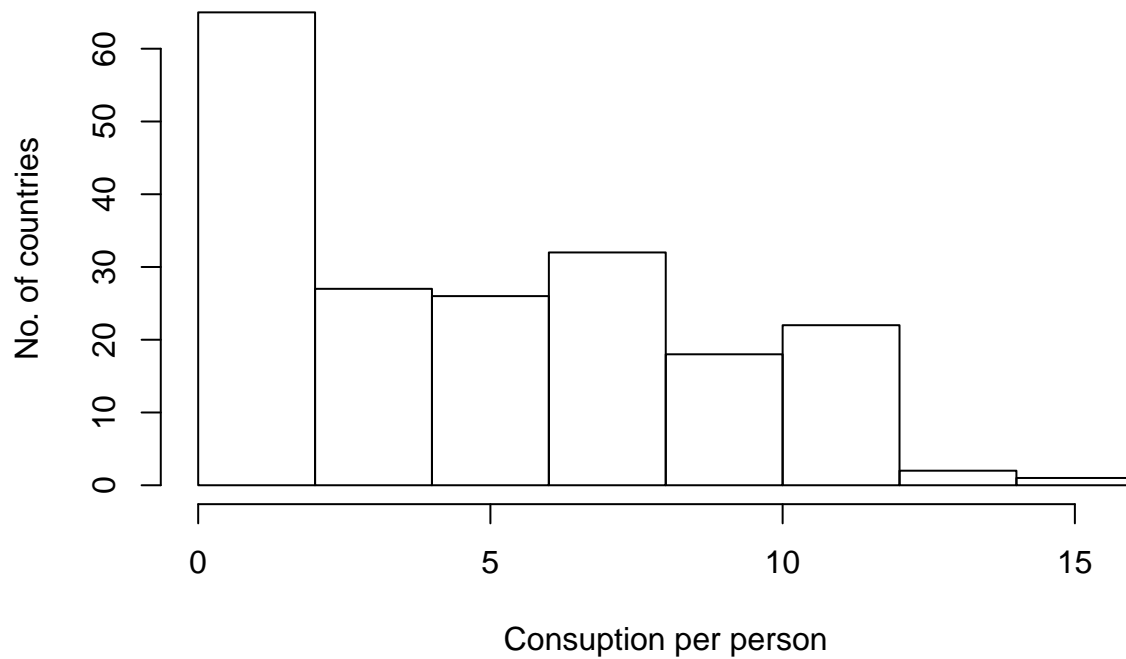
But the consumption of alcohol varies across countries. The histograms of beer, wine and spirit consumption show that in a large number of the countries the consumption of is much lower than the average.



The average consumption of alcohol of any kind across all countries is 4.7170984

Similar trend is seen for overall consumption of all three kinds of alcohol wherein the consumption is much lower than the average for a large number of countries.

Consumption Pattern of Alcohol



For example, a closer look at the data reveals that the while the average beer consumption across all countries in 2010 was 106.2, it varied from 0 to a maximum of 376. In most countries the consumption per person was only 76.

Top 10 countries by consumption

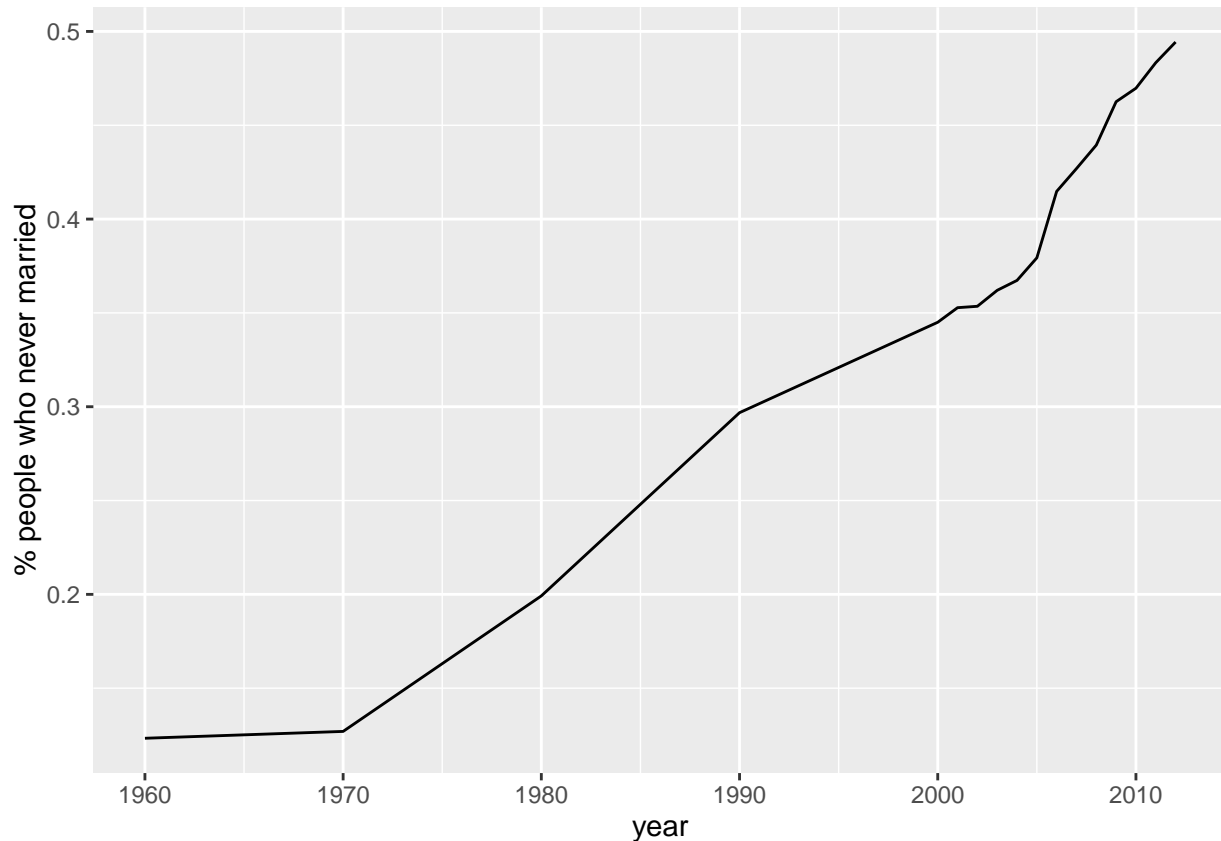
##		country	spirit_servings	country	beer_servings
## 1		Ireland	118	France	127
## 2		Luxembourg	133	Belarus	142
## 3		Andorra	138	Slovakia	196
## 4		France	151	Grenada	199
## 5		Czech Republic	170	Luxembourg	236
## 6		Lithuania	244	Andorra	245
## 7		Slovakia	293	Russian Federation	247
## 8		Russian Federation	326	Ireland	313
## 9		Belarus	373	Lithuania	343
## 10		Grenada	438	Czech Republic	361
##		country	wine_servings		
## 1		Grenada	28		
## 2		Belarus	42		
## 3		Lithuania	56		
## 4		Russian Federation	73		
## 5		Slovakia	116		
## 6		Czech Republic	134		
## 7		Ireland	165		
## 8		Luxembourg	271		
## 9		Andorra	312		
## 10		France	370		

Further, the top 10 beer consuming countries same to be the same as top 10 consumers of wine and other spirits though the ranking differs with the choice of drink. While France has the highest consumption of Wine, Grenada has the highest consumption of Spirits.

Exercise 2

This exercise analyses data on marriage trends in the US from 1960 to 2000. The results are based on analysis of the Decennial Census (years 1960 to 2000) and American Community Survey (years 2001-2012)

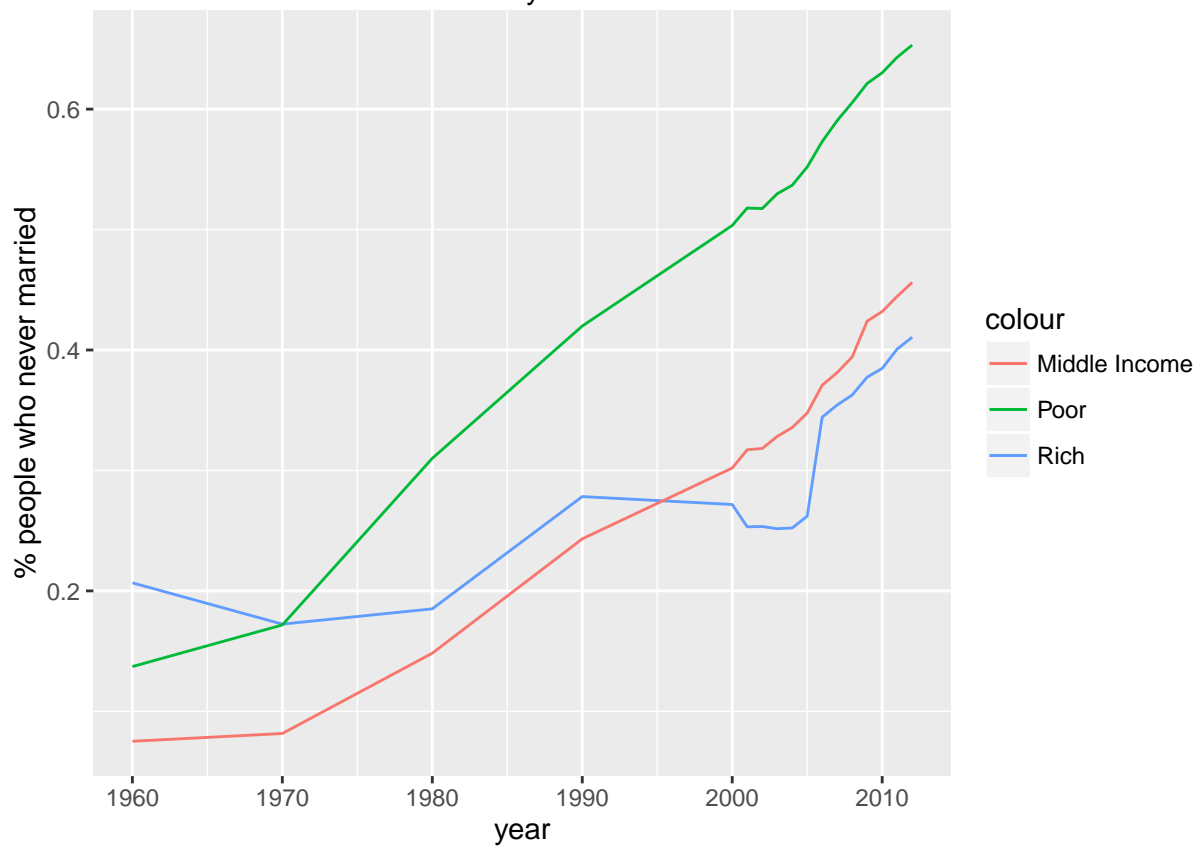
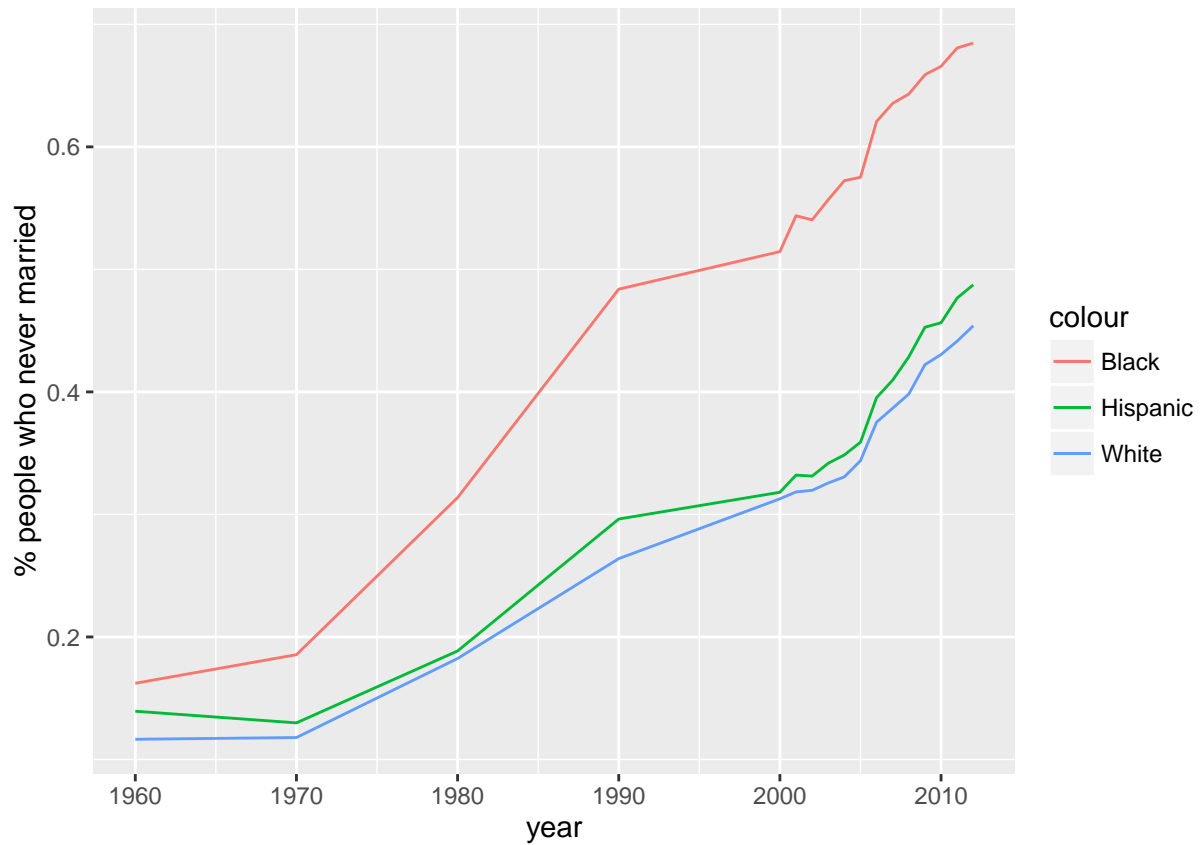
A preliminary look at the data indicates that the proportion of men and women who never marry has been increasing in the US and has reached almost reached 50%.



The rate of marriage varies across race. The average proportion (over time) of people who never married for each racial group is given below:

```
## The mean for White_2534 is 0.33
## The mean for Black_2534 is 0.53
## The mean for Hisp_2534 is 0.35
```

A black person is thus most likely to have never got married. The trend is stable across time as can be seen from the graph below. A similar trend is seen for poor vs. rich people.



The difference in marriage rates between blacks and whites has also been increasing over time. A boxplot

of the difference in never married rates (proportion of black and white people to never marry) before 1990 (year=0) and after 1990 (year=1) has increased.

