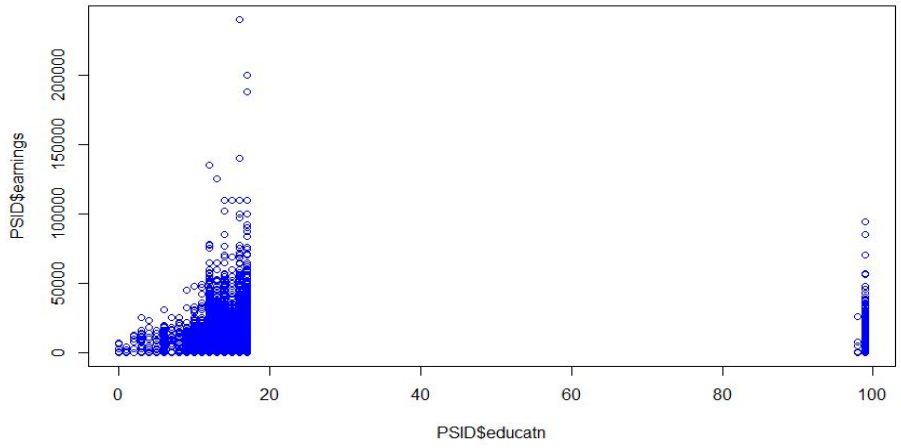
1. What is average highest education level of a person ? Mean :16.38, Max. :99.00
2. What is average incomes of a person ? Mean : 14245
3. What is average working hours of a person ? Mean :1235

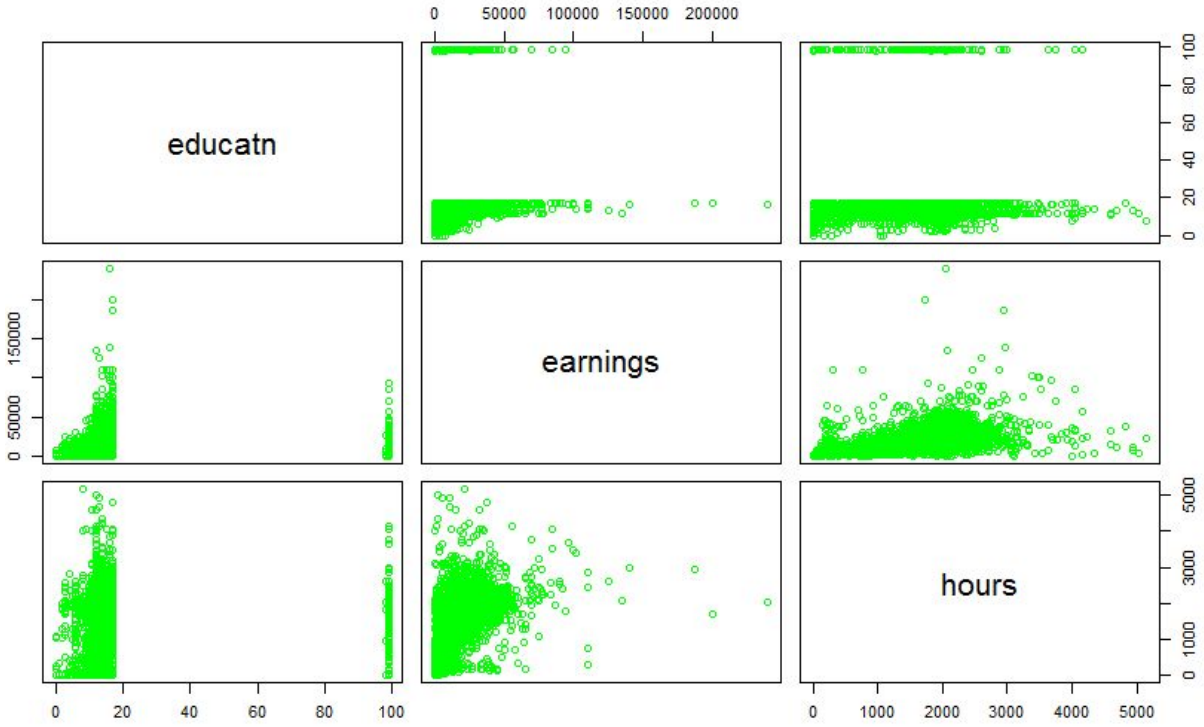
// Correlations

4. Are hight educators get more earnings ?

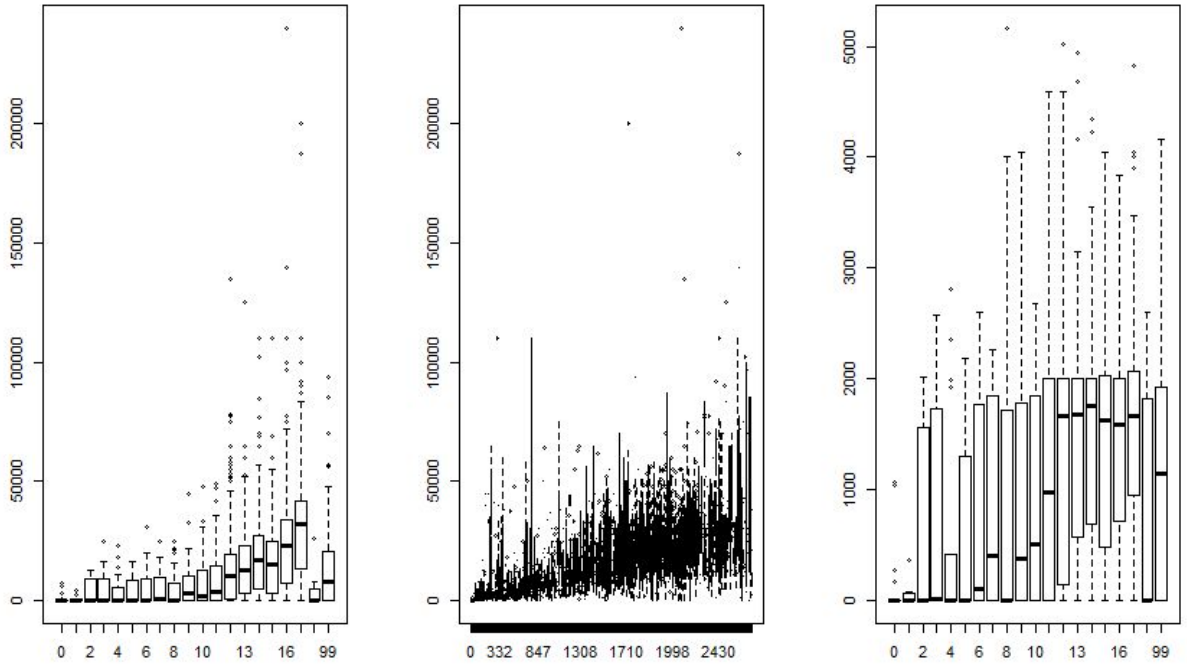
```
par(mfrow=c(1,1))
plot(PSID$educatn, PSID$earnings, col="blue", cex.axis = 1)
```




```
plot(PSID[,5:7], col="green")
```



```
par(mfrow=c(1,3))
boxplot(earnings~educatn, data = PSID)
boxplot(earnings~hours, data = PSID)
boxplot(hours~educatn, data = PSID)
```

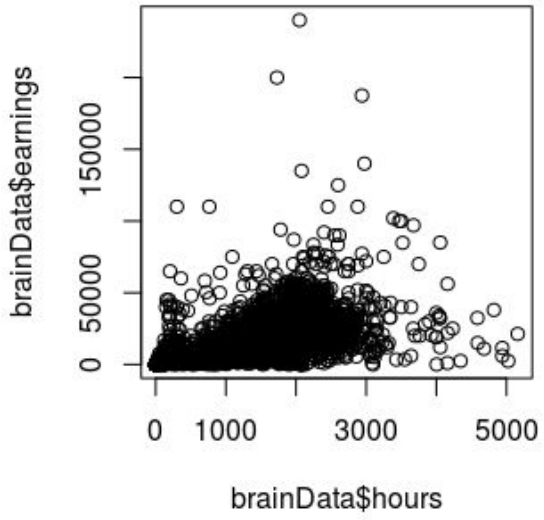


When education level increased in earrings also increased in Figure 1
When number of hours increased, earnings also increased in Figure 2
When number of education level up ,number of hours working also increased Figure 3

5. Are hight educators all married ?
6. Are married all ones have kids ?

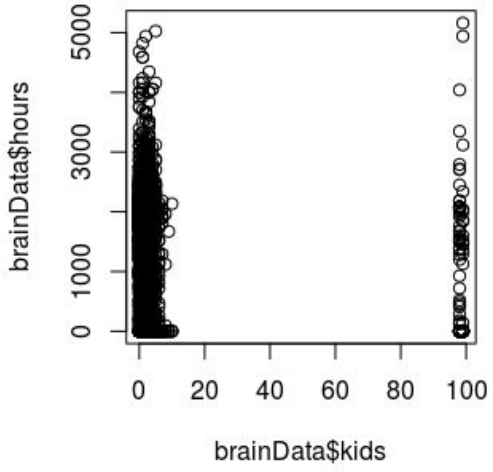
7. Is there correlation between annual working hours and total labor income ?

```
cor(brainData$hours,brainData$earnings)
[1] 0.6352923
cov(brainData$hours,brainData$earnings)
[1] 9618980
```



8. Is there correlation between kids and working hours ?

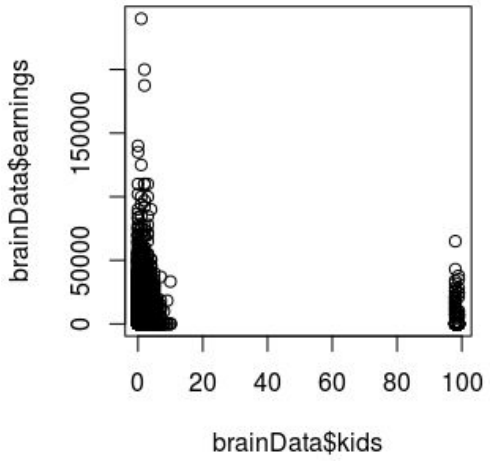
```
cor(brainData$kids,brainData$hours)
[1] -0.08418643

cov(brainData$kids,brainData$hours)
[1] -1187.148
```



9. Is there correlation between kids and labour income ?

```
cov(brainData$kids,brainData$earnings)
[1] -0.09078765
```

```
cov(brainData$kids,brainData$earnings)
[1] -21606.47
```



// correlation between each of columns

	age	educatn	earnings	hours	kids
age	1.00000000	NA	0.07873976	0.04982621	0.10938961
educatn	NA	1	NA	NA	NA
earnings	0.07873976	NA	1.00000000	0.63529230	-0.09078765
hours	0.04982621	NA	0.63529230	1.00000000	-0.08418643
kids	0.10938961	NA	-0.09078765	-0.08418643	1.00000000

10. Is there a person with a high completed education level also has high labour income ?

// Predictive Analysis

11. Given age and highest completed education of a person can we predict his/her income ?
12. Given age ,highest completed education level and income of a person can we predict his annual working hours ?

// Prescriptive Analysis