adv.stats.mod9.R

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#1  
assignment\_data <- data.frame( Country = c("France","Spain","Germany","Spain","Germany", "France","Spain","France","Germany","France"),   
 age = c(44,27,30,38,40,35,52,48,45,37),   
 salary = c(6000,5000,7000,4000,8000),   
 Purchased=c("No","Yes","No","No","Yes", "Yes","No","Yes","No","Yes"))  
  
assignment\_data

## Country age salary Purchased  
## 1 France 44 6000 No  
## 2 Spain 27 5000 Yes  
## 3 Germany 30 7000 No  
## 4 Spain 38 4000 No  
## 5 Germany 40 8000 Yes  
## 6 France 35 6000 Yes  
## 7 Spain 52 5000 No  
## 8 France 48 7000 Yes  
## 9 Germany 45 4000 No  
## 10 France 37 8000 Yes

data<- t(assignment\_data)  
data

## [,1] [,2] [,3] [,4] [,5] [,6] [,7]   
## Country "France" "Spain" "Germany" "Spain" "Germany" "France" "Spain"  
## age "44" "27" "30" "38" "40" "35" "52"   
## salary "6000" "5000" "7000" "4000" "8000" "6000" "5000"   
## Purchased "No" "Yes" "No" "No" "Yes" "Yes" "No"   
## [,8] [,9] [,10]   
## Country "France" "Germany" "France"  
## age "48" "45" "37"   
## salary "7000" "4000" "8000"   
## Purchased "Yes" "No" "Yes"

#2  
assighment9<- table(mtcars$gear,mtcars$cyl, dnn = c("gears","cyl"))  
assighment9

## cyl  
## gears 4 6 8  
## 3 1 2 12  
## 4 8 4 0  
## 5 2 1 2

#2.1  
addmargins(assighment9)

## cyl  
## gears 4 6 8 Sum  
## 3 1 2 12 15  
## 4 8 4 0 12  
## 5 2 1 2 5  
## Sum 11 7 14 32

#2.2  
prop.table(assighment9)

## cyl  
## gears 4 6 8  
## 3 0.03125 0.06250 0.37500  
## 4 0.25000 0.12500 0.00000  
## 5 0.06250 0.03125 0.06250

#2.3  
prop.table(assighment9, margin = 1)

## cyl  
## gears 4 6 8  
## 3 0.06666667 0.13333333 0.80000000  
## 4 0.66666667 0.33333333 0.00000000  
## 5 0.40000000 0.20000000 0.40000000