1. Use the given link and locate the bank marketing dataset. Data Set Link

Perform the below operations:

a. Create a visual for representing missing values in the dataset.

Ans:

>which(is.na(data))

result:integer(0) #no missing values

b. Show a distribution of clients based on a Job.

Ans:barplot(table(data$job),main = "clients based on a Job",

xlab = "name of jobs",col = "yellow",border = "blue")

c. Check whether is there any relation between Job and Marital Status?

Ans:

>job<-as.numeric(data$job)

>marital<-as.numeric(data$marital)

>cor(job,marital)

[1] 0.06939026 #

>bartable = table(data$job, data$marital)

>barplot(bartable, beside = TRUE, legend =levels(unique(data$job)))

d. Check whether is there any association between Job and Education?

Ans:

>job<-as.numeric(data$job)

>education<-as.numeric(data$education)

>cor(job,education)

[1] 0.1701602 #

>bartable = table(data$job, data$education)

>barplot(bartable, beside = TRUE, legend =levels(unique(data$job)))

#employe with primary education are mostly placed in blue-collar job

secondary education are placed in different jobs and tertiary aer mostly placed in

managment and unknown are placed in less jobs

#Positive Direction of Association is there between Job and Education