

R-Code

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datr = read.csv("bank-additional-full.csv", header = TRUE, sep = ";")
summary(datr)
#a. Create a visual for representing missing values in the dataset.
datr[datr=="unknown"] = NA
#table(datr$job)
summary(is.na(datr))
install.packages('VIM')
library(VIM)
aggr_plot <- aggr(datr, col=c('navyblue','red'), numbers=FALSE, sortVars=TRUE, labels=names(datr), ylab=c("Histogram of missing data","Pattern"))

#b. Show a distribution of clients based on a job.
jobcount <- table(datr$job)

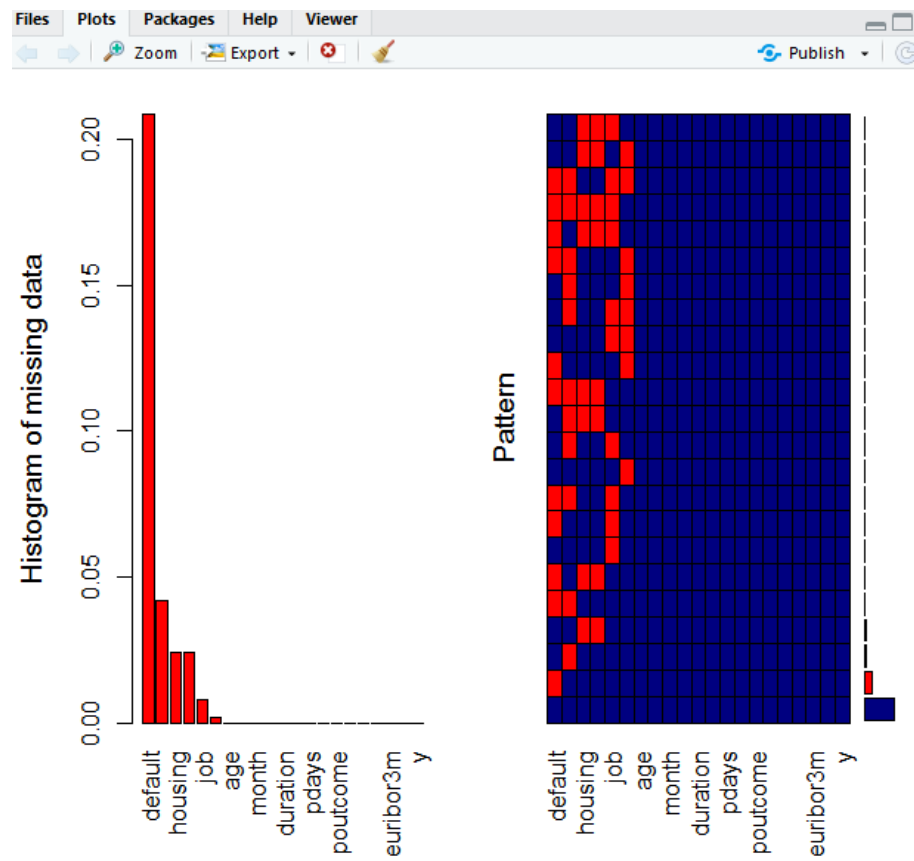
barplot(height = jobcount[order(jobcount, decreasing = TRUE)], col = 'Red')

#c. Check whether is there any relation between Job and Marital Status?
install.packages("gmodels")
library(gmodels)

CrossTable(datr$marital, datr$job)
ggplot(datr, aes(datr$marital, datr$job)) + geom_jitter()

#d. Check whether is there any association between Job and Education?
ggplot(datr, aes(datr$education, datr$job)) + geom_jitter()
```

a)



b)

