A-6.R

acer

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#Exercise  
#creating dataframe with factor variable  
name<-c("Ann","Linn","Rin","Pin","Bin","Tin","Win")  
height <- c(132,151,162,139,166,147,122)  
weight <- c(48,49,66,53,67,52,40)  
gender <-factor(c("male","male","female","female","male","female","male"))  
#create the dataframe df with the above vectors. Name is of type character and gender is of type factor  
#Display the levels of gender.   
#Change the order of levels  
#Add a new row c("Sin",150,55,"Trans"))  
#Add a new level "Trans"  
  
#1  
df=data.frame(name,height,weight,gender)  
View(df)  
str(df)

## 'data.frame': 7 obs. of 4 variables:  
## $ name : chr "Ann" "Linn" "Rin" "Pin" ...  
## $ height: num 132 151 162 139 166 147 122  
## $ weight: num 48 49 66 53 67 52 40  
## $ gender: Factor w/ 2 levels "female","male": 2 2 1 1 2 1 2

#2  
levels(df$gender)

## [1] "female" "male"

#3  
levels(df$gender)=c("male","female")  
str(df)

## 'data.frame': 7 obs. of 4 variables:  
## $ name : chr "Ann" "Linn" "Rin" "Pin" ...  
## $ height: num 132 151 162 139 166 147 122  
## $ weight: num 48 49 66 53 67 52 40  
## $ gender: Factor w/ 2 levels "male","female": 2 2 1 1 2 1 2

#4  
rbind(df,c("Sin",150,55,"Trans"))

## Warning in `[<-.factor`(`\*tmp\*`, ri, value = "Trans"): invalid factor level, NA  
## generated

## name height weight gender  
## 1 Ann 132 48 female  
## 2 Linn 151 49 female  
## 3 Rin 162 66 male  
## 4 Pin 139 53 male  
## 5 Bin 166 67 female  
## 6 Tin 147 52 male  
## 7 Win 122 40 female  
## 8 Sin 150 55 <NA>

#5  
levels(df$gender)=c(levels(df$gender),"Trans")  
str(df)

## 'data.frame': 7 obs. of 4 variables:  
## $ name : chr "Ann" "Linn" "Rin" "Pin" ...  
## $ height: num 132 151 162 139 166 147 122  
## $ weight: num 48 49 66 53 67 52 40  
## $ gender: Factor w/ 3 levels "male","female",..: 2 2 1 1 2 1 2