

DS_Mod1_Flow_control

We'll start off by reading our customer_churn dataset.

```
customer_churn<-read.csv("C:/Users/INTELLIPAAT/Desktop/customer_churn.csv")
```

```
head(customer_churn)
```

```
##  customerID gender SeniorCitizen Partner Dependents tenure PhoneService
## 1 7590-VHVEG Female           0      Yes         No         1           No
## 2 5575-GNVDE  Male           0      No          No        34           Yes
## 3 3668-QPYBK  Male           0      No          No         2           Yes
## 4 7795-CFOCW  Male           0      No          No        45           No
## 5 9237-HQITU  Female          0      No          No         2           Yes
## 6 9305-CDSKC  Female          0      No          No         8           Yes
##      MultipleLines InternetService OnlineSecurity OnlineBackup
## 1 No phone service          DSL              No         Yes
## 2                   No          DSL              Yes        No
## 3                   No          DSL              Yes        Yes
## 4 No phone service          DSL              Yes        No
## 5                   No      Fiber optic          No        No
## 6                   Yes      Fiber optic          No        No
##  DeviceProtection TechSupport StreamingTV StreamingMovies      Contract
## 1                   No           No          No              No Month-to-month
## 2                   Yes           No          No              No  One year
## 3                   No           No          No              No Month-to-month
## 4                   Yes          Yes          No              No  One year
## 5                   No           No          No              No Month-to-month
## 6                   Yes           No          Yes              Yes Month-to-month
##  PaperlessBilling      PaymentMethod MonthlyCharges TotalCharges
## 1                   Yes      Electronic check      29.85      29.85
## 2                   No       Mailed check      56.95     1889.50
## 3                   Yes       Mailed check      53.85      108.15
## 4                   No Bank transfer (automatic)  42.30     1840.75
## 5                   Yes      Electronic check      70.70      151.65
## 6                   Yes      Electronic check      99.65     820.50
##      Churn
## 1      No
## 2      No
## 3     Yes
## 4      No
## 5     Yes
## 6     Yes
```

Here, we are changing the

```
if(customer_churn$gender[1]=="Female"){
  customer_churn$gender[1]<-"Male"
}
head(customer_churn)
```

##	customerID	gender	SeniorCitizen	Partner	Dependents	tenure	PhoneService
## 1	7590-VHVEG	Male	0	Yes	No	1	No
## 2	5575-GNVDE	Male	0	No	No	34	Yes
## 3	3668-QPYBK	Male	0	No	No	2	Yes
## 4	7795-CFOCW	Male	0	No	No	45	No
## 5	9237-HQITU	Female	0	No	No	2	Yes
## 6	9305-CDSKC	Female	0	No	No	8	Yes

##	MultipleLines	InternetService	OnlineSecurity	OnlineBackup
## 1	No phone service	DSL	No	Yes
## 2	No	DSL	Yes	No
## 3	No	DSL	Yes	Yes
## 4	No phone service	DSL	Yes	No
## 5	No	Fiber optic	No	No
## 6	Yes	Fiber optic	No	No

##	DeviceProtection	TechSupport	StreamingTV	StreamingMovies	Contract
## 1	No	No	No	No	Month-to-month
## 2	Yes	No	No	No	One year
## 3	No	No	No	No	Month-to-month
## 4	Yes	Yes	No	No	One year
## 5	No	No	No	No	Month-to-month
## 6	Yes	No	Yes	Yes	Month-to-month

##	PaperlessBilling	PaymentMethod	MonthlyCharges	TotalCharges
## 1	Yes	Electronic check	29.85	29.85
## 2	No	Mailed check	56.95	1889.50
## 3	Yes	Mailed check	53.85	108.15
## 4	No	Bank transfer (automatic)	42.30	1840.75
## 5	Yes	Electronic check	70.70	151.65
## 6	Yes	Electronic check	99.65	820.50

##	Churn
## 1	No
## 2	No
## 3	Yes
## 4	No
## 5	Yes
## 6	Yes

```
if(customer_churn$tenure[10]>50){
  customer_churn$MonthlyCharges[0] <-customer_churn$MonthlyCharges[10]*0.9
}
head(customer_churn)
```

```
## customerID gender SeniorCitizen Partner Dependents tenure PhoneService
## 1 7590-VHVEG Male 0 Yes No 1 No
## 2 5575-GNVDE Male 0 No No 34 Yes
## 3 3668-QPYBK Male 0 No No 2 Yes
## 4 7795-CFOCW Male 0 No No 45 No
## 5 9237-HQITU Female 0 No No 2 Yes
## 6 9305-CDSKC Female 0 No No 8 Yes
## MultipleLines InternetService OnlineSecurity OnlineBackup
## 1 No phone service DSL No Yes
## 2 No DSL Yes No
## 3 No DSL Yes Yes
## 4 No phone service DSL Yes No
## 5 No Fiber optic No No
## 6 Yes Fiber optic No No
## DeviceProtection TechSupport StreamingTV StreamingMovies Contract
## 1 No No No No Month-to-month
## 2 Yes No No No One year
## 3 No No No No Month-to-month
## 4 Yes Yes No No One year
## 5 No No No No Month-to-month
## 6 Yes No Yes Yes Month-to-month
## PaperlessBilling PaymentMethod MonthlyCharges TotalCharges
## 1 Yes Electronic check 29.85 29.85
## 2 No Mailed check 56.95 1889.50
## 3 Yes Mailed check 53.85 108.15
## 4 No Bank transfer (automatic) 42.30 1840.75
## 5 Yes Electronic check 70.70 151.65
## 6 Yes Electronic check 99.65 820.50
## Churn
## 1 No
## 2 No
## 3 Yes
## 4 No
## 5 Yes
## 6 Yes
```

```
if(customer_churn$Churn[1]=="Yes"){
print("Please give us a feedback on how we can improve our network")
}else{
print("Thanks for using our network")
}

## [1] "Thanks for using our network"
```

```
switch (as.character(customer_churn$InternetService[5]),
"DSL"=customer_churn$MonthlyCharges[5]*0.9,
```

```
"Fiber optic"=customer_churn$MonthlyCharges[5]*0.8) -
>customer_churn$MonthlyCharges[5]
```

```
count=0
for(i in 1:nrow(customer_churn)){
  if(customer_churn$gender[i]=="Male"){
    count=count+1
  }
}
count

## [1] 3556

table(customer_churn$gender)

##
## Female    Male
##   3487    3556
```

```
count=0
i=1
while(i<=nrow(customer_churn)){
  if(customer_churn$PaymentMethod[i]=="Electronic check"){
    count=count+1
  }
  i=i+1
}
count

## [1] 2365

table(customer_churn$PaymentMethod)

##
## Bank transfer (automatic)  Credit card (automatic)
##                1544                1522
##           Electronic check                Mailed check
##                2365                1612
```

```
count=0
i=1
while(i<=nrow(customer_churn)){
  if(customer_churn$PaymentMethod[i]=="Electronic check"){
    count=count+1
  }
  i=i+1
}
```

```

}
count

## [1] 2365

table(customer_churn$PaymentMethod)

##
## Bank transfer (automatic)    Credit card (automatic)
##                1544                1522
##      Electronic check      Mailed check
##                2365                1612

```

```

gender_count <-function(x)
{
  count=0
  for(i in 1:length(x)){
    if(x[i]=="Male"){
      count=count+1
    }
  }
  count
}

gender_count(customer_churn$gender)

## [1] 3556

table(customer_churn$gender)

##
## Female    Male
##    3487    3556

```

```

gender_count <-function(x)
{
  count=0
  for(i in 1:length(x)){
    if(x[i]=="Female"){
      count=count+1
    }
  }
  count
}

gender_count(customer_churn$gender)

## [1] 3487

```

```
table(customer_churn$gender)
```

```
##
```

```
## Female    Male
```

```
##    3487    3556
```