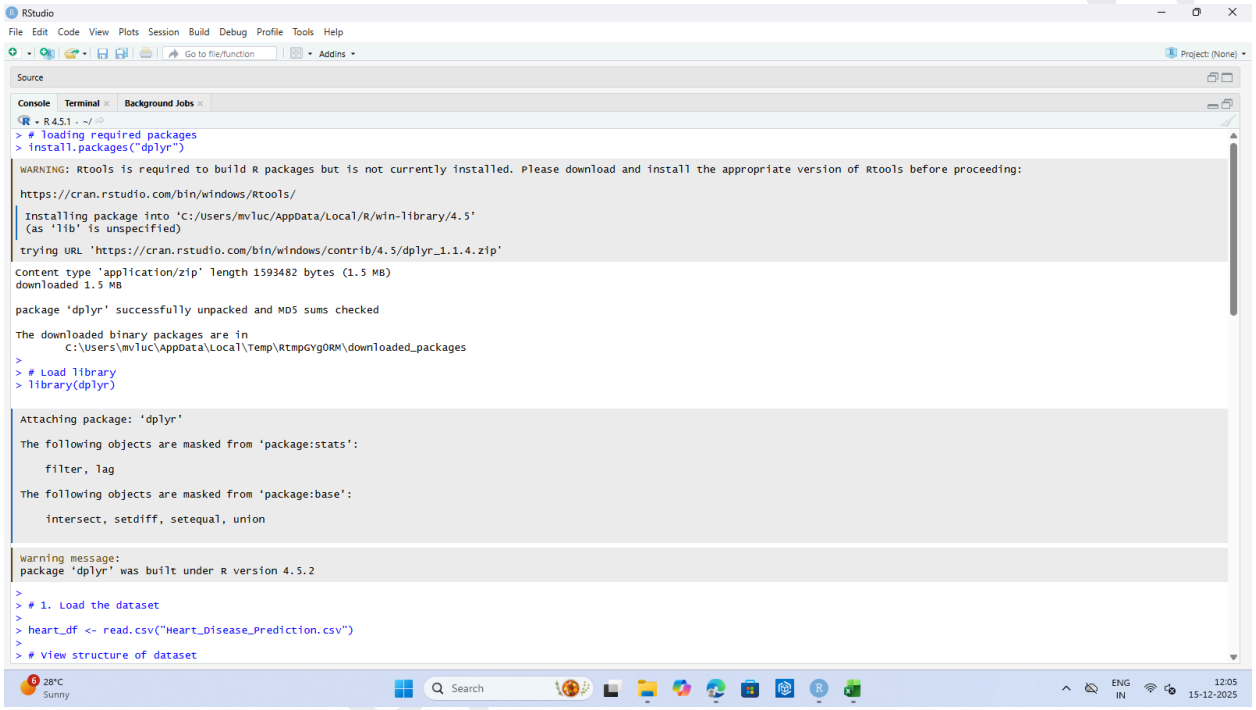
SHETH L.U.J. AND SIR M.V. COLLEGE OF ARTS SCIENCE AND COMMERCE

SUBJECT : R Programming

Practical No 2 Module II

Aim : Generating descriptive statistics using summary() or describe() (R)

Output :



NAME : SHUBHAM SANJAY KARAPE
ROLL NO : S085

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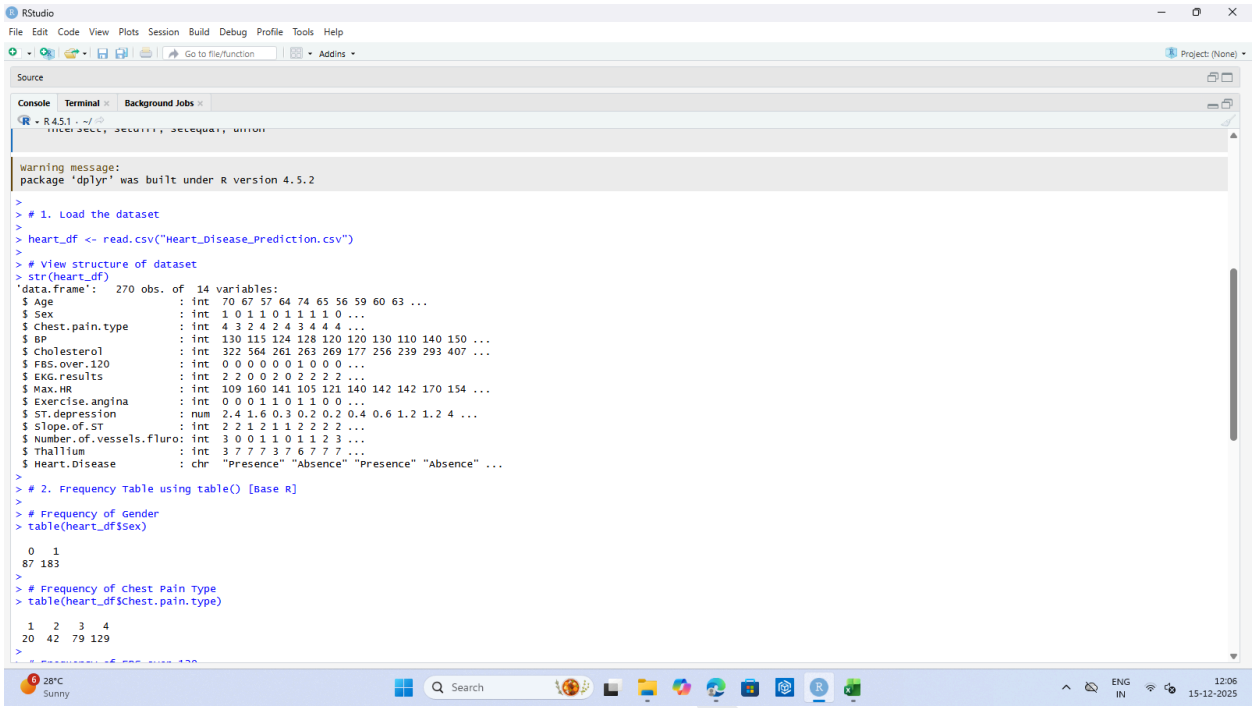
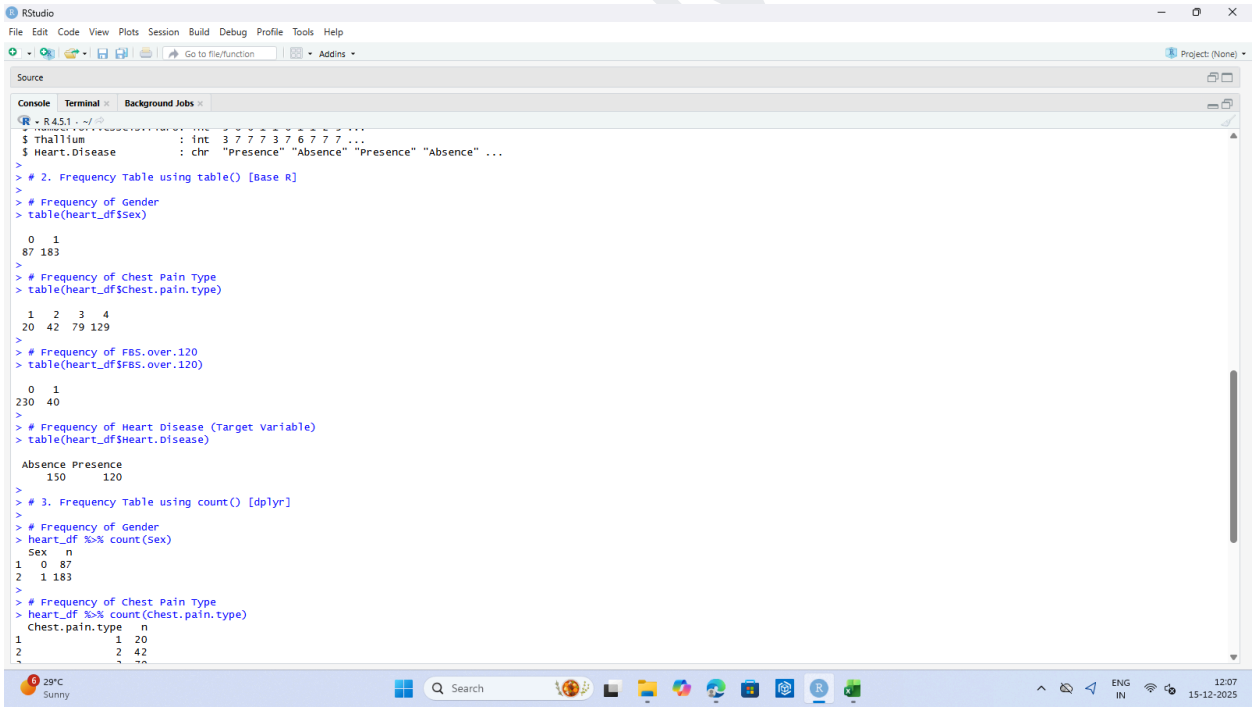


```
Warning message:
package 'dplyr' was built under R version 4.5.2

>
> # 1. Load the dataset
>
> heart_df <- read.csv("Heart_Disease_Prediction.csv")
>
> # View structure of dataset
> str(heart_df)
'data.frame':   270 obs. of  14 variables:
 $ Age                  : int  70 67 57 64 74 65 56 59 60 63 ...
 $ Sex                  : int  1 0 1 1 0 1 1 1 1 0 ...
 $ Chest.pain.type      : int  4 3 2 4 2 4 3 4 4 4 ...
 $ BP                   : int  130 115 124 128 120 120 130 110 140 150 ...
 $ Cholesterol          : int  322 564 261 263 269 177 256 239 293 407 ...
 $ FBS.over.120         : int  0 0 0 0 0 0 1 0 0 0 ...
 $ EKG.results          : int  2 2 0 0 2 0 2 2 2 2 ...
 $ Max.HR               : int  109 160 141 105 121 140 142 142 170 154 ...
 $ Exercise.angina      : int  0 0 0 1 1 0 1 1 0 0 ...
 $ ST.depression        : num  2.4 1.6 0.3 0.2 0.2 0.4 0.6 1.2 1.2 4 ...
 $ Slope.of.ST          : int  2 2 1 2 1 1 2 2 2 2 ...
 $ Number.of.vessels.fluro: int  3 0 0 1 1 0 1 1 2 3 ...
 $ Thallium             : int  3 7 7 7 3 7 6 7 7 7 ...
 $ Heart.Disease        : chr  "Presence" "Absence" "Presence" "Absence" ...
>
> # 2. Frequency Table using table() [Base R]
>
> # Frequency of Gender
> table(heart_df$Sex)

  0   1
 87 183
>
> # Frequency of Chest Pain Type
> table(heart_df$Chest.pain.type)

  1   2   3   4
 20  42  79 129
>
```



```
 $ Thallium             : int  3 7 7 7 3 7 6 7 7 7 ...
 $ Heart.Disease        : chr  "Presence" "Absence" "Presence" "Absence" ...
>
> # 2. Frequency Table using table() [Base R]
>
> # Frequency of Gender
> table(heart_df$Sex)

  0   1
 87 183
>
> # Frequency of Chest Pain Type
> table(heart_df$Chest.pain.type)

  1   2   3   4
 20  42  79 129
>
> # Frequency of FBS.over.120
> table(heart_df$FBS.over.120)

  0   1
230  40
>
> # Frequency of Heart Disease (Target Variable)
> table(heart_df$Heart.Disease)

 Absence Presence
     150      120
>
> # 3. Frequency Table using count() [dplyr]
>
> # Frequency of Gender
> heart_df %>% count(Sex)
  Sex   n
1   0  87
2   1 183
>
> # Frequency of Chest Pain Type
> heart_df %>% count(Chest.pain.type)
  Chest.pain.type   n
1               1  20
2               2  42
```

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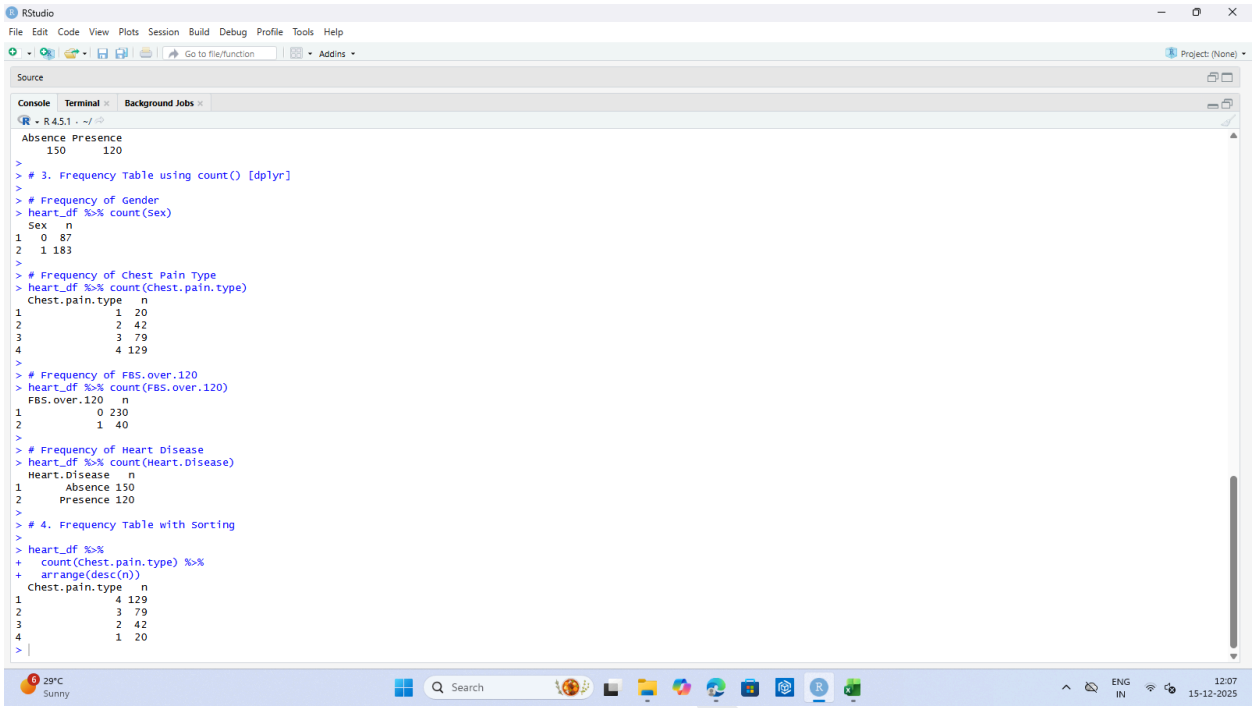

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