

# SHETH L.U.J AND SIR M.V COLLEGE

RStudio interface showing R code execution. The console displays the following code and output:

```
> colnames(pcos)
[1] "Sl..No" "Patient.File.No." "PCOS..Y.N."
[4] "Age..yrs." "Weight..Kg." "Height.Cm."
[7] "BMI" "Blood.Group" "Pulse.rate.bpm."
[10] "RR..breaths.min." "Hb.g.dl." "Cycle.R.I."
[13] "Cycle.length.days." "Marraige.Status..Yrs." "Pregnant.Y.N."
[16] "No..of.abortions" "I...beta.HCG.mIU.mL." "II...beta.HCG.mIU.mL."
[19] "FSH.mIU.mL." "LH.mIU.mL." "FSH.LH"
[22] "Hip.inch." "Waist.inch." "Waist.Hip.Ratio"
[25] "TSH.mIU.L." "AMH.ng.mL." "PRL.ng.mL."
[28] "Vit.D3..ng.mL." "PRG.ng.mL." "RBS.mg.dl."
[31] "Weight.gain.Y.N." "hair.growth.Y.N." "Skin.darkening..Y.N."
[34] "Hair.loss.Y.N." "Pimples.Y.N." "Fast.Food..Y.N."
[37] "Reg.Exercise.Y.N." "BP..Systolic..mmHg." "BP..Diastolic..mmHg."
[40] "Follicle.No...L." "Follicle.No...R." "Avg..F.size..L...mm."
[43] "Avg..F.size..R...mm." "Endometrium..mm." "X"
```

The Environment pane shows the following objects:

- Female\_high\_quantity: 260 obs. of 17 variables
- high\_total\_high\_qty: 158 obs. of 17 variables
- high\_total\_subset: 227 obs. of 17 variables
- low\_price\_filter: 439 obs. of 17 variables
- member\_or\_normal: 1000 obs. of 17 variables
- pcos: 541 obs. of 45 variables
- PCOS\_data: 541 obs. of 45 variables
- sales: 1000 obs. of 17 variables
- special\_sales: 516 obs. of 17 variables

RStudio interface showing R code execution. The console displays the following code and output:

```
> library(dplyr)
> pcos <- read.csv("C:/Users/yukta/R Prog_S120/PCOS_data.csv")
> head(pcos)
  Sl..No Patient.File.No. PCOS..Y.N. Age..yrs. Weight..Kg. Height.Cm. BMI Blood.Group
1      1           1      0      28      44.6      152.0 19.3      15
2      2           2      0      36      65.0      161.5 24.9      15
3      3           3      1      33      68.8      165.0 25.3      11
4      4           4      0      37      65.0      148.0 29.7      13
5      5           5      0      25      52.0      161.0 20.1      11
6      6           6      0      36      74.1      165.0 27.2      15
  Pulse.rate.bpm. RR..breaths.min. Hb.g.dl. Cycle.R.I. Cycle.length.days. Marraige.Status..Yrs.
1           78           22      10.48           2           5           7
2           74           20      11.70           2           5           11
3           72           18      11.80           2           5           10
4           72           20      12.00           2           5           4
5           72           18      10.00           2           5           1
6           78           28      11.20           2           5           8
  Pregnant.Y.N. No..of.abortions I...beta.HCG.mIU.mL. II...beta.HCG.mIU.mL. FSH.mIU.mL.
1      0      0      1.99      1.99      7.95
2      0      0      60.80      1.99      6.73
3      1      0      494.08      494.08      5.54
4      0      0      1.99      1.99      8.06
5      1      0      801.45      801.45      3.98
6      1      0      239.97      1.99      3.24
  LH.mIU.mL. FSH.LH Hip.inch. Waist.inch. Waist.Hip.Ratio TSH.mIU.L. AMH.ng.mL. PRL.ng.mL.
1      3.68      2.16      36      30      0.83      0.68      2.07      45.16
2      1.09      6.17      38      32      0.84      3.16      1.53      20.09
3      0.88      6.30      40      36      0.90      2.54      6.63      10.52
4      2.36      3.42      42      36      0.86      16.41      1.22      36.90
5      0.90      4.42      37      30      0.81      3.57      2.26      30.09
6      1.07      3.03      44      38      0.86      1.60      6.74      16.18
  Vit.D3..ng.mL. PRG.ng.mL. RBS.mg.dl. Weight.gain.Y.N. hair.growth.Y.N. Skin.darkening..Y.N.
1      17.1      0.57      92      0      0      0
2      61.3      0.97      92      0      0      0
3      49.7      0.36      84      0      0      0
4      33.4      0.36      76      0      0      0
5      43.8      0.38      84      0      0      0
6      52.4      0.30      76      1      0      0
  Hair.loss.Y.N. Pimples.Y.N. Fast.food..Y.N. Reg.Exercise.Y.N. BP..Systolic..mmHg.
1      0      0      0      0      110
2      0      0      0      0      120
3      1      1      1      0      120
4      0      0      0      0      120
5      1      0      0      0      120
6      1      0      0      0      110
```

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The screenshot displays the R Studio interface. The main editor shows an R script with the following content:

```
R - R 4.5.2 - ~/ -  
File Edit Code View Plots Session Build Debug Profile Tools Help  
Go to file/function Addins  
Project: (None)  
Source  
Console Terminal Background Jobs  
1 Hair.loss.Y.N. Pimples.Y.N. Fast.food..Y.N. Reg.Exercise.Y.N. BP..Systolic..mmHg.  
2 0 0 0 1 0 110  
3 1 1 1 0 0 120  
4 0 0 0 0 0 120  
5 1 0 0 0 0 120  
6 1 0 0 0 0 110  
BP..Diastolic..mmHg. Follicle.No...L. Follicle.No...R. Avg..F.size..L...mm.  
1 80 3 3 18  
2 70 3 5 15  
3 80 13 15 18  
4 70 2 2 15  
5 80 3 4 16  
6 70 9 6 16  
Avg..F.size..R...mm. Endometrium..mm. X  
1 18 8.5  
2 14 3.7  
3 20 10.0  
4 14 7.5  
5 14 7.0  
6 20 8.0  
> colnames(pcos)  
[1] "Sl..No"  
[43] "Age..yrs."  
[7] "BMT"  
[10] "RR..breaths.min."  
[13] "Cycle.length.days."  
[16] "No..of.abortions"  
[19] "FSH.mIU.mL."  
[22] "Hip.inch."  
[25] "TSH.mIU.L."  
[28] "Vit.D3.ng.mL."  
[31] "Weight.gain.Y.N."  
[34] "Hair.loss.Y.N."  
[37] "Reg.Exercise.Y.N."  
[40] "Follicle.No...L."  
[43] "Avg..F.size..R...mm."  
"Patient.File.No." "PCOS..Y.N."  
"Weight..Kg." "Height.Cm."  
"Blood.Group" "Pulse.rate.bpm."  
"Hb.g.dL" "Cycle.R.I."  
"Marriage.Status..Yrs." "Pregnant.Y.N."  
"L...beta.HCG.mIU.mL." "I...beta.HCG.mIU.mL."  
"LH.mIU.mL." "FSH.LH"  
"Waist.inch." "Waist.Hip.Ratio"  
"AMH.ng.mL." "PRL.ng.mL."  
"PRG.ng.mL." "RBS.ng.dL."  
"hair.growth.Y.N." "Skin.darkening..Y.N."  
"Pimples.Y.N." "Fast.food..Y.N."  
"BP..Systolic..mmHg." "BP..Diastolic..mmHg."  
"Follicle.No...R." "Avg..F.size..L...mm."  
"Endometrium..mm." "X"  
> pcos_sorted_age <- pcos |>  
+ arrange(Age)
```

The right-hand pane shows the Environment tab with a list of objects:

Object	Size
Female_high_quantity	260 obs. of 17 variables
high_total_high_qty	158 obs. of 17 variables
high_total_subset	227 obs. of 17 variables
low_price_filter	439 obs. of 17 variables
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pcos	541 obs. of 45 variables
pcos_data	541 obs. of 45 variables
sales	1000 obs. of 17 variables
special_sales	516 obs. of 17 variables

The Files tab shows the file explorer for the project directory, listing various files and folders.

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