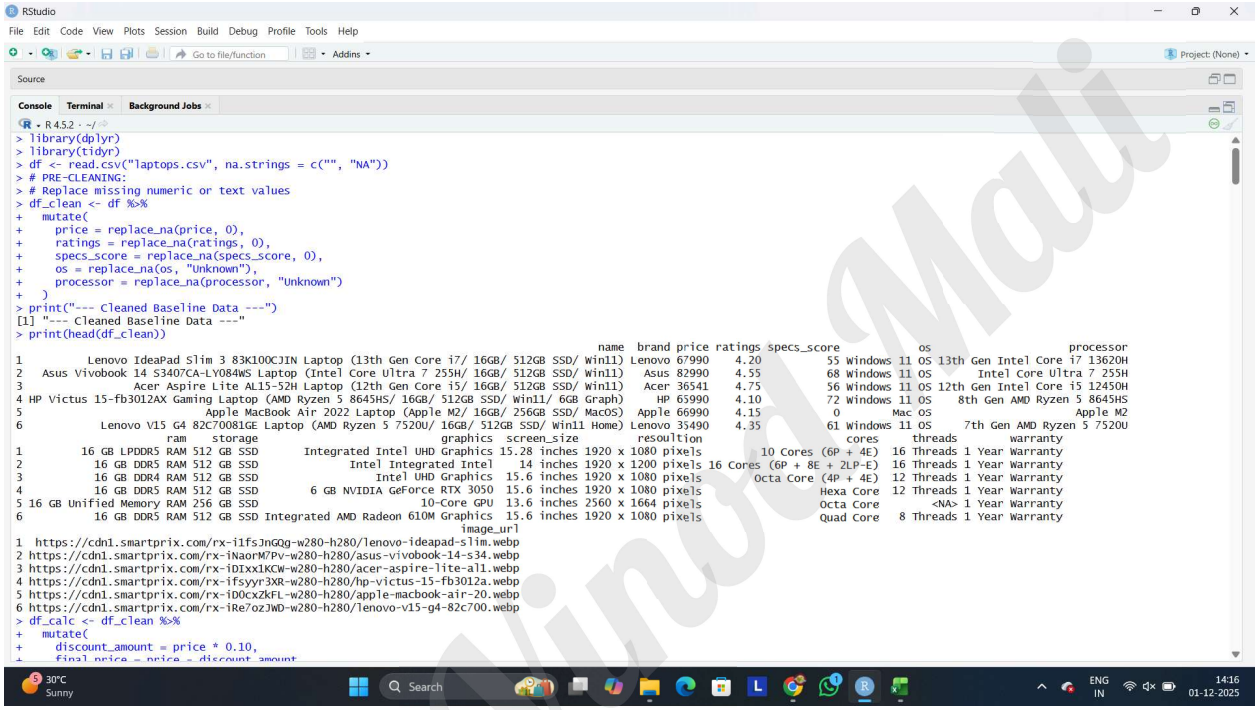
Sheth L.U.J & Sir M.V College Of Science
Subject :- Data Analysis with SAS / SPSS /R
Practical No 10

Aim :- Creating new variables using transformations and calculations in R. import dataset.



```
> library(dplyr)
> library(tidyr)
> df <- read.csv("laptops.csv", na.strings = c("", "NA"))
> # PRE-CLEANING:
> # Replace missing numeric or text values
> df_clean <- df %>%
+   mutate(
+     price = replace_na(price, 0),
+     ratings = replace_na(ratings, 0),
+     specs_score = replace_na(specs_score, 0),
+     os = replace_na(os, "Unknown"),
+     processor = replace_na(processor, "Unknown")
+   )
> print("--- Cleaned Baseline Data ---")
[1] "--- Cleaned Baseline Data ---"
> print(head(df_clean))
                                                                    name  brand price ratings specs_score                os                    processor
1          Lenovo IdeaPad Slim 3 83K100CJIN Laptop (13th Gen Core i7/ 16GB/ 512GB SSD/ Win11) Lenovo 67990    4.20          55 Windows 11 OS 13th Gen Intel Core i7 13620H
2   Asus Vivobook 14 S3407CA-LY084WS Laptop (Intel Core Ultra 7 255H/ 16GB/ 512GB SSD/ Win11)   Asus 82990    4.55          68 Windows 11 OS       Intel Core Ultra 7 255H
3              Acer Aspire Lite AL15-52H Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11)   Acer 36541    4.75          56 Windows 11 OS 12th Gen Intel Core i5 12450H
4 HP Victus 15-fb3012AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 6GB Graph)     HP 65990    4.10          72 Windows 11 OS    8th Gen AMD Ryzen 5 8645HS
5                        Apple MacBook Air 2022 Laptop (Apple M2/ 16GB/ 256GB SSD/ MacOS)  Apple 66990    4.15           0        Mac OS                    Apple M2
6           Lenovo V15 G4 82C70081GE Laptop (AMD Ryzen 5 7520U/ 16GB/ 512GB SSD/ Win11 Home) Lenovo 35490    4.35          61 Windows 11 OS     7th Gen AMD Ryzen 5 7520U
                  ram    storage                                graphics  screen_size          resoultion                cores     threads         warranty
1         16 GB LPDDR5 RAM 512 GB SSD       Integrated Intel UHD Graphics 15.28 inches 1920 x 1080 pixels       10 Cores (6P + 4E)  16 Threads 1 Year Warranty
2           16 GB DDR5 RAM 512 GB SSD              Intel Integrated Intel    14 inches 1920 x 1200 pixels 16 Cores (6P + 8E + 2LP-E)  16 Threads 1 Year Warranty
3           16 GB DDR4 RAM 512 GB SSD                  Intel UHD Graphics  15.6 inches 1920 x 1080 pixels       Octa Core (4P + 4E)  12 Threads 1 Year Warranty
4           16 GB DDR5 RAM 512 GB SSD        6 GB NVIDIA GeForce RTX 3050  15.6 inches 1920 x 1080 pixels                   Hexa Core  12 Threads 1 Year Warranty
5 16 GB Unified Memory RAM 256 GB SSD                          10-Core GPU  13.6 inches 2560 x 1664 pixels                   Octa Core        <NA> 1 Year Warranty
6           16 GB DDR5 RAM 512 GB SSD Integrated AMD Radeon 610M Graphics  15.6 inches 1920 x 1080 pixels                   Quad Core   8 Threads 1 Year Warranty
                                                  image_url
1  https://cdn1.smartprix.com/rx-i1fsJnGQg-w280-h280/lenovo-ideapad-slim.webp
2 https://cdn1.smartprix.com/rx-iNaorM7Pv-w280-h280/asus-vivobook-14-s34.webp
3 https://cdn1.smartprix.com/rx-iDIxx1KCW-w280-h280/acer-aspire-lite-al1.webp
4 https://cdn1.smartprix.com/rx-ifsyyr3XR-w280-h280/hp-victus-15-fb3012a.webp
5 https://cdn1.smartprix.com/rx-iD0cxZkFL-w280-h280/apple-macbook-air-20.webp
6 https://cdn1.smartprix.com/rx-iRe7ozJWD-w280-h280/lenovo-v15-g4-82c700.webp
> df_calc <- df_clean %>%
+   mutate(
+     discount_amount = price * 0.10,
+     final_price = price - discount_amount
```

S092 Vinod Mali

Name :- Vinod Mali
Roll No :- S092

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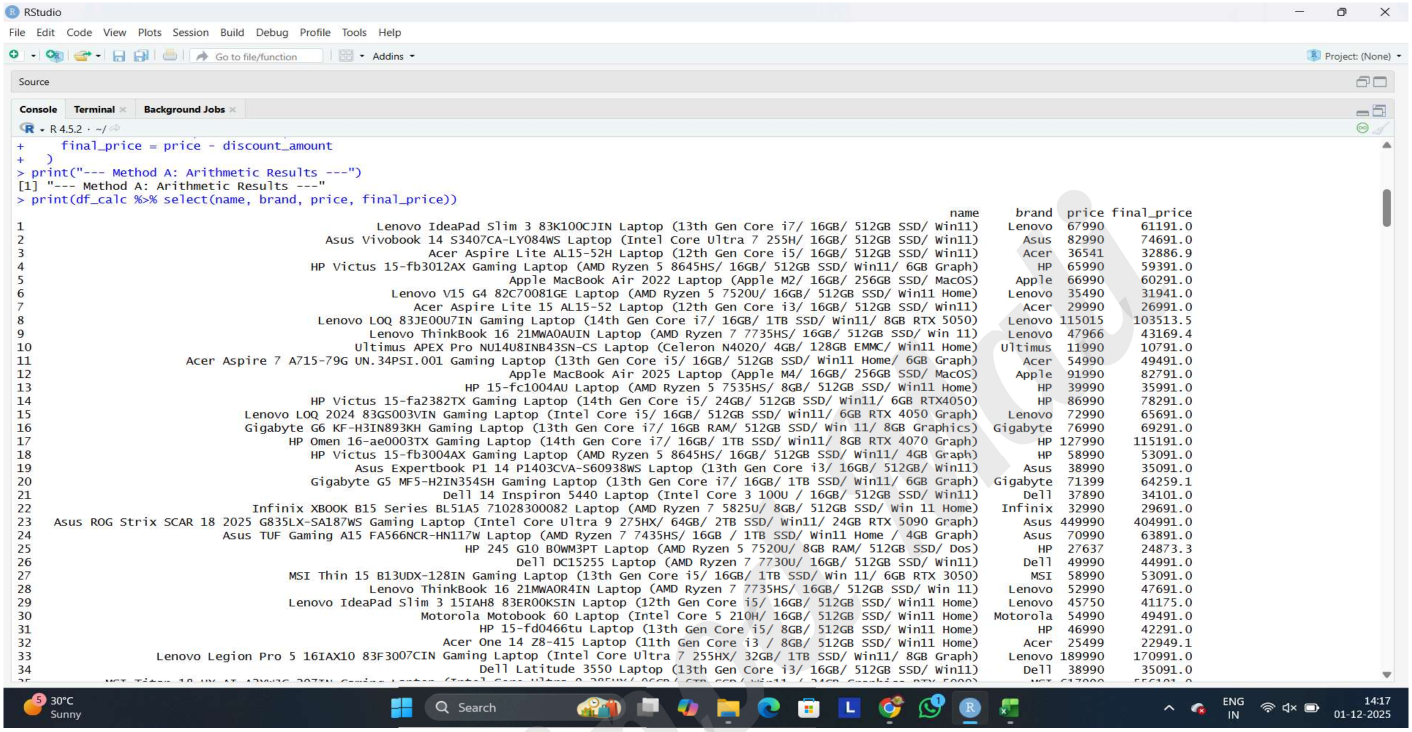

```
+     final_price = price - discount_amount
+   )
> print("--- Method A: Arithmetic Results ---")
[1] "--- Method A: Arithmetic Results ---"
> print(df_calc %>% select(name, brand, price, final_price))
                                                                                         name    brand  price final_price
1                          Lenovo IdeaPad Slim 3 83K100CJIN Laptop (13th Gen Core i7/ 16GB/ 512GB SSD/ Win11)   Lenovo  67990     61191.0
2                Asus Vivobook 14 S3407CA-LY084WS Laptop (Intel Core Ultra 7 255H/ 16GB/ 512GB SSD/ Win11)     Asus  82990     74691.0
3                              Acer Aspire Lite AL15-52H Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11)     Acer  36541     32886.9
4                 HP Victus 15-fb3012AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 6GB Graph)       HP  65990     59391.0
5                                   Apple MacBook Air 2022 Laptop (Apple M2/ 16GB/ 256GB SSD/ MacOS)    Apple  66990     60291.0
6                     Lenovo V15 G4 82C70081GE Laptop (AMD Ryzen 5 7520U/ 16GB/ 512GB SSD/ Win11 Home)   Lenovo  35490     31941.0
7                            Acer Aspire Lite 15 AL15-52 Laptop (12th Gen Core i3/ 16GB/ 512GB SSD/ Win11)     Acer  29990     26991.0
8             Lenovo LOQ 83JE00U7IN Gaming Laptop (14th Gen Core i7/ 16GB/ 1TB SSD/ Win11/ 8GB RTX 5050)   Lenovo 115015    103513.5
9                   Lenovo ThinkBook 16 21MWA0AUIN Laptop (AMD Ryzen 7 7735HS/ 16GB/ 512GB SSD/ Win 11)   Lenovo  47966     43169.4
10              Ultimus APEX Pro NU14U8INB43SN-CS Laptop (Celeron N4020/ 4GB/ 128GB EMMC/ Win11 Home)  Ultimus  11990     10791.0
11   Acer Aspire 7 A715-79G UN.34PSI.001 Gaming Laptop (13th Gen Core i5/ 16GB/ 512GB SSD/ Win11 Home/ 6GB Graph)     Acer  54990     49491.0
12                                  Apple MacBook Air 2025 Laptop (Apple M4/ 16GB/ 256GB SSD/ MacOS)    Apple  91990     82791.0
13                          HP 15-fc1004AU Laptop (AMD Ryzen 5 7535HS/ 8GB/ 512GB SSD/ Win11 Home)       HP  39990     35991.0
14                HP Victus 15-fa2382TX Gaming Laptop (14th Gen Core i5/ 24GB/ 512GB SSD/ Win11/ 6GB RTX4050)       HP  86990     78291.0
15      Lenovo LOQ 2024 83GS003VIN Gaming Laptop (Intel Core i5/ 16GB/ 512GB SSD/ Win11/ 6GB RTX 4050 Graph)   Lenovo  72990     65691.0
16      Gigabyte G6 KF-H3IN893KH Gaming Laptop (13th Gen Core i7/ 16GB RAM/ 512GB SSD/ Win 11/ 8GB Graphics) Gigabyte  76990     69291.0
17            HP Omen 16-ae0003TX Gaming Laptop (14th Gen Core i7/ 16GB/ 1TB SSD/ Win11/ 8GB RTX 4070 Graph)       HP 127990    115191.0
18                HP Victus 15-fb3004AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 4GB Graph)       HP  58990     53091.0
19                     Asus Expertbook P1 14 P1403CVA-S60938WS Laptop (13th Gen Core i3/ 16GB/ 512GB/ Win11)     Asus  38990     35091.0
20               Gigabyte G5 MF5-H2IN354SH Gaming Laptop (13th Gen Core i7/ 16GB/ 1TB SSD/ Win11/ 6GB Graph) Gigabyte  71399     64259.1
21                           Dell 14 Inspiron 5440 Laptop (Intel Core 3 100U / 16GB/ 512GB SSD/ Win11)     Dell  37890     34101.0
22             Infinix XBOOK B15 Series BL51A5 71028300082 Laptop (AMD Ryzen 7 5825U/ 8GB/ 512GB SSD/ Win 11 Home)  Infinix  32990     29691.0
23  Asus ROG Strix SCAR 18 2025 G835LX-SA187WS Gaming Laptop (Intel Core Ultra 9 275HX/ 64GB/ 2TB SSD/ Win11/ 24GB RTX 5090 Graph)     Asus 449990    404991.0
24          Asus TUF Gaming A15 FA566NCR-HN117W Laptop (AMD Ryzen 7 7435HS/ 16GB / 1TB SSD/ Win11 Home / 4GB Graph)     Asus  70990     63891.0
25                        HP 245 G10 B0WM3PT Laptop (AMD Ryzen 5 7520U/ 8GB RAM/ 512GB SSD/ Dos)       HP  27637     24873.3
26                            Dell DC15255 Laptop (AMD Ryzen 7 7730U/ 16GB/ 512GB SSD/ Win11)     Dell  49990     44991.0
27              MSI Thin 15 B13UDX-128IN Gaming Laptop (13th Gen Core i5/ 16GB/ 1TB SSD/ Win 11/ 6GB RTX 3050)      MSI  58990     53091.0
28                  Lenovo ThinkBook 16 21MWA0R4IN Laptop (AMD Ryzen 7 7735HS/ 16GB/ 512GB SSD/ Win 11)   Lenovo  52990     47691.0
29                Lenovo IdeaPad Slim 3 15IAH8 83ER00KSIN Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11 Home)   Lenovo  45750     41175.0
30                       Motorola Motobook 60 Laptop (Intel Core 5 210H/ 16GB/ 512GB SSD/ Win11 Home) Motorola  54990     49491.0
31                           HP 15-fd0466tu Laptop (13th Gen Core i5/ 8GB/ 512GB SSD/ Win11 Home)       HP  46990     42291.0
32                          Acer One 14 Z8-415 Laptop (11th Gen Core i3 / 8GB/ 512GB SSD/ Win11 Home)     Acer  25499     22949.1
33     Lenovo Legion Pro 5 16IAX10 83F3007CIN Gaming Laptop (Intel Core Ultra 7 255HX/ 32GB/ 1TB SSD/ Win11/ 8GB Graph)   Lenovo 189990    170991.0
34                           Dell Latitude 3550 Laptop (13th Gen Core i3/ 16GB/ 512GB SSD/ Win11)     Dell  38990     35091.0
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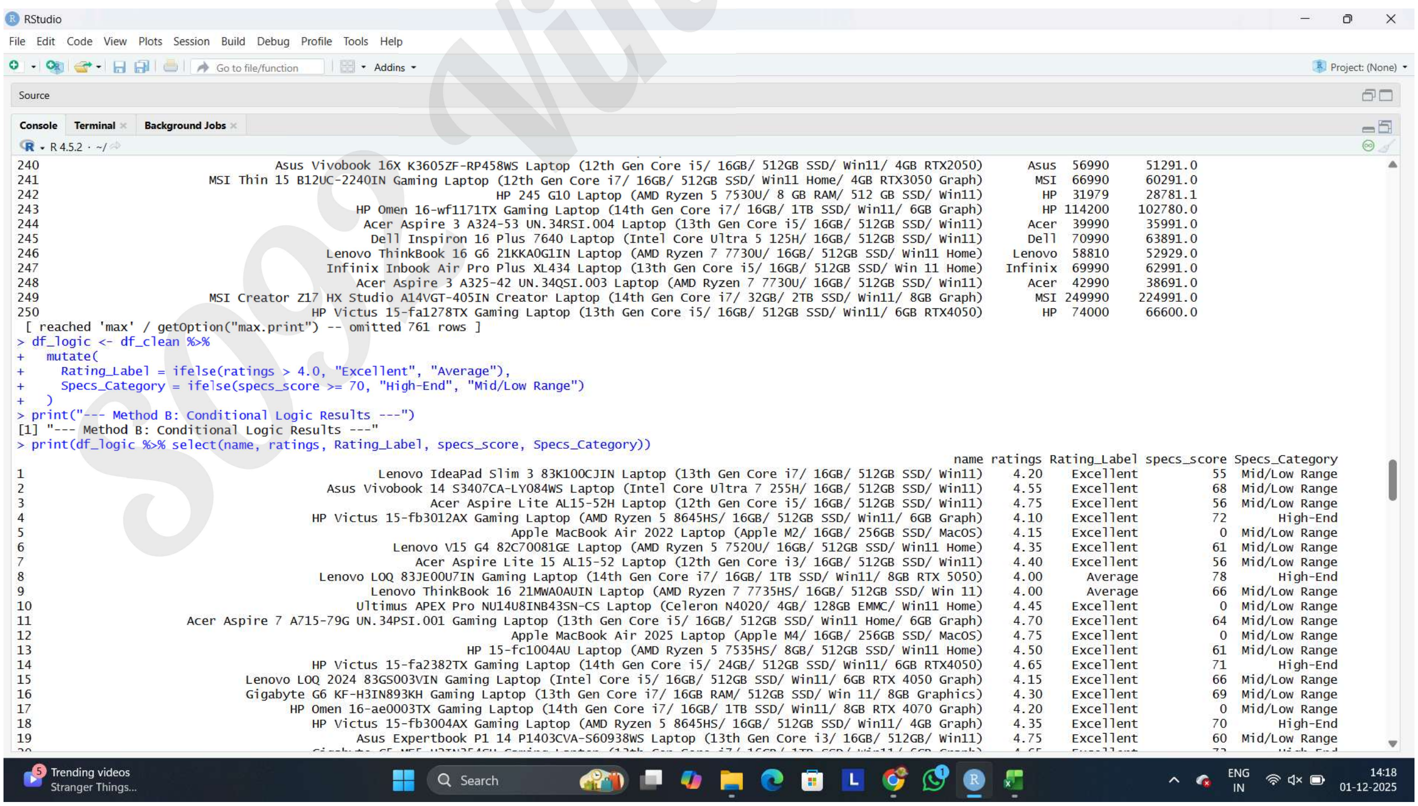

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240              Asus Vivobook 16X K3605ZF-RP458WS Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11/ 4GB RTX2050)     Asus  56990     51291.0
241           MSI Thin 15 B12UC-2240IN Gaming Laptop (12th Gen Core i7/ 16GB/ 512GB SSD/ Win11 Home/ 4GB RTX3050 Graph)      MSI  66990     60291.0
242                              HP 245 G10 Laptop (AMD Ryzen 5 7530U/ 8 GB RAM/ 512 GB SSD/ Win11)       HP  31979     28781.1
243              HP Omen 16-wf1171TX Gaming Laptop (14th Gen Core i7/ 16GB/ 1TB SSD/ Win11/ 6GB Graph)       HP 114200    102780.0
244                    Acer Aspire 3 A324-53 UN.34RSI.004 Laptop (13th Gen Core i5/ 16GB/ 512GB SSD/ Win11)     Acer  39990     35991.0
245                     Dell Inspiron 16 Plus 7640 Laptop (Intel Core Ultra 5 125H/ 16GB/ 512GB SSD/ Win11)     Dell  70990     63891.0
246                Lenovo ThinkBook 16 G6 21KKA0G1IN Laptop (AMD Ryzen 7 7730U/ 16GB/ 512GB SSD/ Win11 Home)   Lenovo  58810     52929.0
247              Infinix Inbook Air Pro Plus XL434 Laptop (13th Gen Core i5/ 16GB/ 512GB SSD/ Win 11 Home)  Infinix  69990     62991.0
248                    Acer Aspire 3 A325-42 UN.34QSI.003 Laptop (AMD Ryzen 7 7730U/ 16GB/ 512GB SSD/ Win11)     Acer  42990     38691.0
249          MSI Creator Z17 HX Studio A14VGT-405IN Creator Laptop (14th Gen Core i7/ 32GB/ 2TB SSD/ Win11/ 8GB Graph)      MSI 249990    224991.0
250                HP Victus 15-fa1278TX Gaming Laptop (13th Gen Core i5/ 16GB/ 512GB SSD/ Win11/ 6GB RTX4050)       HP  74000     66600.0
 [ reached 'max' / getOption("max.print") -- omitted 761 rows ]
> df_logic <- df_clean %>%
+   mutate(
+     Rating_Label = ifelse(ratings > 4.0, "Excellent", "Average"),
+     Specs_Category = ifelse(specs_score >= 70, "High-End", "Mid/Low Range")
+   )
> print("--- Method B: Conditional Logic Results ---")
[1] "--- Method B: Conditional Logic Results ---"
> print(df_logic %>% select(name, ratings, Rating_Label, specs_score, Specs_Category))
                                                                                         name ratings Rating_Label specs_score Specs_Category
1                          Lenovo IdeaPad Slim 3 83K100CJIN Laptop (13th Gen Core i7/ 16GB/ 512GB SSD/ Win11)    4.20    Excellent          55  Mid/Low Range
2                Asus Vivobook 14 S3407CA-LY084WS Laptop (Intel Core Ultra 7 255H/ 16GB/ 512GB SSD/ Win11)    4.55    Excellent          68  Mid/Low Range
3                              Acer Aspire Lite AL15-52H Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11)    4.75    Excellent          56  Mid/Low Range
4                 HP Victus 15-fb3012AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 6GB Graph)    4.10    Excellent          72       High-End
5                                   Apple MacBook Air 2022 Laptop (Apple M2/ 16GB/ 256GB SSD/ MacOS)    4.15    Excellent           0  Mid/Low Range
6                     Lenovo V15 G4 82C70081GE Laptop (AMD Ryzen 5 7520U/ 16GB/ 512GB SSD/ Win11 Home)    4.35    Excellent          61  Mid/Low Range
7                            Acer Aspire Lite 15 AL15-52 Laptop (12th Gen Core i3/ 16GB/ 512GB SSD/ Win11)    4.40    Excellent          56  Mid/Low Range
8             Lenovo LOQ 83JE00U7IN Gaming Laptop (14th Gen Core i7/ 16GB/ 1TB SSD/ Win11/ 8GB RTX 5050)    4.00      Average          78       High-End
9                   Lenovo ThinkBook 16 21MWA0AUIN Laptop (AMD Ryzen 7 7735HS/ 16GB/ 512GB SSD/ Win 11)    4.00      Average          66  Mid/Low Range
10              Ultimus APEX Pro NU14U8INB43SN-CS Laptop (Celeron N4020/ 4GB/ 128GB EMMC/ Win11 Home)    4.45    Excellent           0  Mid/Low Range
11   Acer Aspire 7 A715-79G UN.34PSI.001 Gaming Laptop (13th Gen Core i5/ 16GB/ 512GB SSD/ Win11 Home/ 6GB Graph)    4.70    Excellent          64  Mid/Low Range
12                                  Apple MacBook Air 2025 Laptop (Apple M4/ 16GB/ 256GB SSD/ MacOS)    4.75    Excellent           0  Mid/Low Range
13                          HP 15-fc1004AU Laptop (AMD Ryzen 5 7535HS/ 8GB/ 512GB SSD/ Win11 Home)    4.50    Excellent          61  Mid/Low Range
14                HP Victus 15-fa2382TX Gaming Laptop (14th Gen Core i5/ 24GB/ 512GB SSD/ Win11/ 6GB RTX4050)    4.65    Excellent          71       High-End
15      Lenovo LOQ 2024 83GS003VIN Gaming Laptop (Intel Core i5/ 16GB/ 512GB SSD/ Win11/ 6GB RTX 4050 Graph)    4.15    Excellent          66  Mid/Low Range
16      Gigabyte G6 KF-H3IN893KH Gaming Laptop (13th Gen Core i7/ 16GB RAM/ 512GB SSD/ Win 11/ 8GB Graphics)    4.30    Excellent          69  Mid/Low Range
17            HP Omen 16-ae0003TX Gaming Laptop (14th Gen Core i7/ 16GB/ 1TB SSD/ Win11/ 8GB RTX 4070 Graph)    4.20    Excellent           0  Mid/Low Range
18                HP Victus 15-fb3004AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 4GB Graph)    4.35    Excellent          70       High-End
19                     Asus Expertbook P1 14 P1403CVA-S60938WS Laptop (13th Gen Core i3/ 16GB/ 512GB/ Win11)    4.75    Excellent          60  Mid/Low Range
```


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Roll No :- S092

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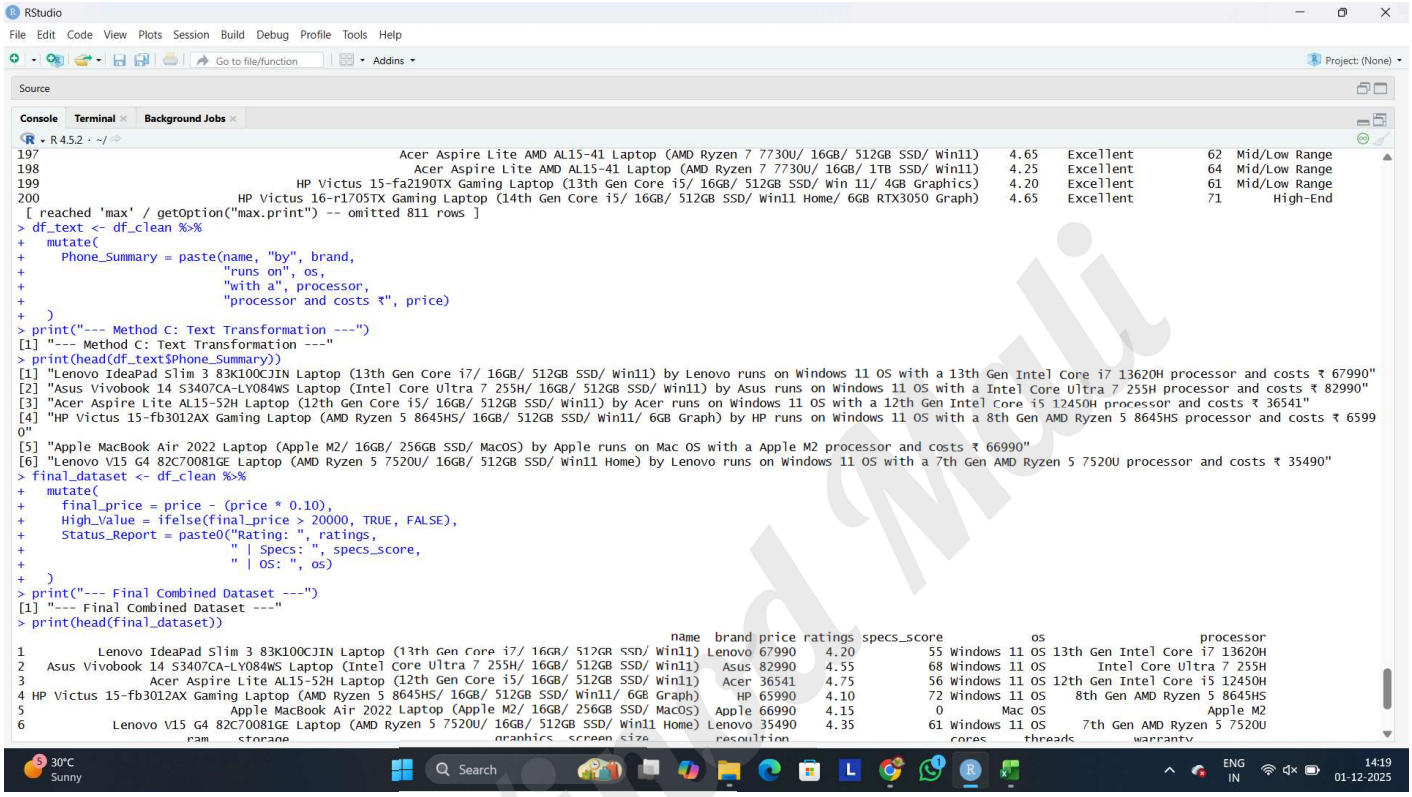

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197                                                    Acer Aspire Lite AMD AL15-41 Laptop (AMD Ryzen 7 7730U/ 16GB/ 512GB SSD/ Win11)    4.65    Excellent          62  Mid/Low Range
198                                                      Acer Aspire Lite AMD AL15-41 Laptop (AMD Ryzen 7 7730U/ 16GB/ 1TB SSD/ Win11)    4.25    Excellent          64  Mid/Low Range
199                                                HP Victus 15-fa2190TX Gaming Laptop (13th Gen Core i5/ 16GB/ 512GB SSD/ Win 11/ 4GB Graphics)    4.20    Excellent          61  Mid/Low Range
200                                  HP Victus 16-r1705TX Gaming Laptop (14th Gen Core i5/ 16GB/ 512GB SSD/ Win11 Home/ 6GB RTX3050 Graph)    4.65    Excellent          71       High-End
 [ reached 'max' / getOption("max.print") -- omitted 811 rows ]
> df_text <- df_clean %>%
+   mutate(
+     Phone_Summary = paste(name, "by", brand,
+                           "runs on", os,
+                           "with a", processor,
+                           "processor and costs ₹", price)
+   )
> print("--- Method C: Text Transformation ---")
[1] "--- Method C: Text Transformation ---"
> print(head(df_text$Phone_Summary))
[1] "Lenovo IdeaPad Slim 3 83K100CJIN Laptop (13th Gen Core i7/ 16GB/ 512GB SSD/ Win11) by Lenovo runs on Windows 11 OS with a 13th Gen Intel Core i7 13620H processor and costs ₹ 67990"
[2] "Asus Vivobook 14 S3407CA-LY084WS Laptop (Intel Core Ultra 7 255H/ 16GB/ 512GB SSD/ Win11) by Asus runs on Windows 11 OS with a Intel Core Ultra 7 255H processor and costs ₹ 82990"
[3] "Acer Aspire Lite AL15-52H Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11) by Acer runs on Windows 11 OS with a 12th Gen Intel Core i5 12450H processor and costs ₹ 36541"
[4] "HP Victus 15-fb3012AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 6GB Graph) by HP runs on Windows 11 OS with a 8th Gen AMD Ryzen 5 8645HS processor and costs ₹ 6599
0"
[5] "Apple MacBook Air 2022 Laptop (Apple M2/ 16GB/ 256GB SSD/ MacOS) by Apple runs on Mac OS with a Apple M2 processor and costs ₹ 66990"
[6] "Lenovo V15 G4 82C70081GE Laptop (AMD Ryzen 5 7520U/ 16GB/ 512GB SSD/ Win11 Home) by Lenovo runs on Windows 11 OS with a 7th Gen AMD Ryzen 5 7520U processor and costs ₹ 35490"
> final_dataset <- df_clean %>%
+   mutate(
+     final_price = price - (price * 0.10),
+     High_Value = ifelse(final_price > 20000, TRUE, FALSE),
+     Status_Report = paste0("Rating: ", ratings,
+                            " | Specs: ", specs_score,
+                            " | OS: ", os)
+   )
> print("--- Final Combined Dataset ---")
[1] "--- Final Combined Dataset ---"
> print(head(final_dataset))
                                                                    name  brand price ratings specs_score           os                    processor
1         Lenovo IdeaPad Slim 3 83K100CJIN Laptop (13th Gen Core i7/ 16GB/ 512GB SSD/ Win11) Lenovo 67990    4.20          55 Windows 11 OS 13th Gen Intel Core i7 13620H
2   Asus Vivobook 14 S3407CA-LY084WS Laptop (Intel Core Ultra 7 255H/ 16GB/ 512GB SSD/ Win11)   Asus 82990    4.55          68 Windows 11 OS       Intel Core Ultra 7 255H
3                Acer Aspire Lite AL15-52H Laptop (12th Gen Core i5/ 16GB/ 512GB SSD/ Win11)   Acer 36541    4.75          56 Windows 11 OS 12th Gen Intel Core i5 12450H
4 HP Victus 15-fb3012AX Gaming Laptop (AMD Ryzen 5 8645HS/ 16GB/ 512GB SSD/ Win11/ 6GB Graph)     HP 65990    4.10          72 Windows 11 OS    8th Gen AMD Ryzen 5 8645HS
5                          Apple MacBook Air 2022 Laptop (Apple M2/ 16GB/ 256GB SSD/ MacOS)  Apple 66990    4.15           0         Mac OS                 Apple M2
6            Lenovo V15 G4 82C70081GE Laptop (AMD Ryzen 5 7520U/ 16GB/ 512GB SSD/ Win11 Home) Lenovo 35490    4.35          61 Windows 11 OS     7th Gen AMD Ryzen 5 7520U
                   ram    storage                                graphics  screen_size        resoultion                cores     threads        warranty
1         16 GB LPDDR5 RAM 512 GB SSD     Integrated Intel UHD Graphics 15.28 inches 1920 x 1080 pixels        10 Cores (6P + 4E)  16 Threads 1 Year Warranty
2           16 GB DDR5 RAM 512 GB SSD                Intel Integrated Intel    14 inches 1920 x 1200 pixels 16 Cores (6P + 8E + 2LP-E)  16 Threads 1 Year Warranty
3           16 GB DDR4 RAM 512 GB SSD                    Intel UHD Graphics  15.6 inches 1920 x 1080 pixels        Octa Core (4P + 4E)  12 Threads 1 Year Warranty
4           16 GB DDR5 RAM 512 GB SSD 6 GB NVIDIA GeForce RTX 3050  15.6 inches 1920 x 1080 pixels                  Hexa Core  12 Threads 1 Year Warranty
5 16 GB Unified Memory RAM 256 GB SSD                      10-Core GPU  13.6 inches 2560 x 1664 pixels                 Octa Core        <NA> 1 Year Warranty
6           16 GB DDR5 RAM 512 GB SSD Integrated AMD Radeon 610M Graphics  15.6 inches 1920 x 1080 pixels                 Quad Core   8 Threads 1 Year Warranty
                                                image_url final_price High_Value                                Status_Report
1  https://cdn1.smartprix.com/rx-i1fsJnGQg-w280-h280/lenovo-ideapad-slim.webp     61191.0       TRUE  Rating: 4.2 | Specs: 55 | OS: Windows 11 OS
2 https://cdn1.smartprix.com/rx-iNaorM7Pv-w280-h280/asus-vivobook-14-s34.webp     74691.0       TRUE Rating: 4.55 | Specs: 68 | OS: Windows 11 OS
3 https://cdn1.smartprix.com/rx-iDIxx1KCW-w280-h280/acer-aspire-lite-al1.webp     32886.9       TRUE Rating: 4.75 | Specs: 56 | OS: Windows 11 OS
4 https://cdn1.smartprix.com/rx-ifsyyr3XR-w280-h280/hp-victus-15-fb3012a.webp     59391.0       TRUE  Rating: 4.1 | Specs: 72 | OS: Windows 11 OS
5 https://cdn1.smartprix.com/rx-iDOcxZkFL-w280-h280/apple-macbook-air-20.webp     60291.0       TRUE        Rating: 4.15 | Specs: 0 | OS: Mac OS
6 https://cdn1.smartprix.com/rx-iRe7ozJWD-w280-h280/lenovo-v15-g4-82c700.webp     31941.0       TRUE Rating: 4.35 | Specs: 61 | OS: Windows 11 OS
>
```

S092 Vinod Mali

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