

Sheth L.U.J. & Sir M.V. College

10. Creating new variables using transformations and calculations in R.

import dataset.

	year	make	model	trim	body	transmission	vin	state	condition	odometer	color	interior	seller	mmr	sellingprice	saledate
1	2015	Kia	Sorento	LX	SUV	automatic	5wyktca69fg566472	ca	5	16639	white	black	kia motors america inc	20500	21500	Tue I
2	2015	Kia	Sorento	LX	SUV	automatic	5wyktca69fg56119	ca	5	9393	white	beige	kia motors america inc	20800	21500	Tue I
3	2014	BMW	3 Series	328i SULEV	Sedan	automatic	wba5a5c1e116351	ca	45	1331	gray	black	financial services remarketing (lease)	31900	30000	Thu J
4	2015	Volvo	S60	T5	Sedan	automatic	yv1612tb4f1310987	ca	41	14282	white	black	volvo na rep/world omni	27500	27750	Thu J
5	2014	BMW	6 Series Gran Coupe	650i	Sedan	automatic	wba65a5c257e1d129731	ca	43	2641	gray	black	financial services remarketing (lease)	66000	67000	Thu I
6	2015	Nissan	Altima	2.5 S	Sedan	automatic	1n4al3ap3nf1n326013	ca	1	5554	gray	black	enterprise vehicle exchange / tra / rental / tulsa	15350	10500	Tue I
7	2014	BMW	M5	Base	Sedan	automatic	wbsfv9c51ed593089	ca	34	14943	black	black	the hertz corporation	69000	65000	Wed
8	2014	Chevrolet	Cruze	1LT	Sedan	automatic	1g1pc5b5b2e1218460	ca	2	28617	black	black	enterprise vehicle exchange / tra / rental / tulsa	11900	9800	Tue I
9	2014	Audi	A4	2.0T Premium Plus quattro	Sedan	automatic	wauffaf3en030343	ca	42	9557	white	black	audi mission viejo	32100	32250	Thu I
10	2014	Chevrolet	Camaro	LT	Convertible	automatic	2g1fb3d37e9218789	ca	3	4809	red	black	d/m auto sales inc	26300	17500	Tue J
11	2014	Audi	A6	3.0T Prestige quattro	Sedan	automatic	waughaf0en062916	ca	48	14414	black	black	desert auto trade	47300	49750	Tue I
12	2015	Kia	Optima	LX	Sedan	automatic	5xexpn4a73f353538	ca	48	2034	red	tan	kia motors finance	15150	17700	Tue I
13	2015	Ford	Fusion	SE	Sedan	automatic	3fa6p0hdxf145753	ca	2	5559	white	beige	enterprise vehicle exchange / tra / rental / tulsa	15350	12000	Thu J
14	2015	Kia	Sorento	LX	SUV	automatic	5wyktca69fg561407	ca	5	14634	silver	black	kia motors america inc	20600	21500	Tue I
15	2014	Chevrolet	Cruze	2LT	Sedan	automatic	1g1pc5b5b2e120097	ca	NA	15686	blue	black	avis rac/san leandro	13900	10600	Tue I
16	2015	Nissan	Altima	2.5 S	Sedan	automatic	1n4al3ap5fc124223	ca	2	11398	black	black	enterprise vehicle exchange / tra / rental / tulsa	14750	14100	Tue I
17	2015	Hyundai	Sonata	SE	Sedan	automatic	5npe24d4fh0001562	ca	NA	8311	red	—	avis tra	15200	4200	Tue I
18	2014	Audi	Q5	2.0T Premium Plus quattro	SUV	automatic	wa1lfafvea085074	ca	49	7983	white	black	audi north scottsdale	37100	40000	Thu I
19	2014	Chevrolet	Camaro	LS	Coupe	automatic	2g1fa1e39e9134494	ca	17	13441	black	black	wells fargo dealer services	17750	17000	Tue I
20	2014	BMW	6 Series	650i	Convertible	automatic	wbay9c53ae169260	ca	34	8819	black	black	the hertz corporation	68000	67200	Wed
21	2015	Chevrolet	Impala	LTZ	Sedan	automatic	2g1165a5309f103921	ca	19	14538	silver	black	enterprise vehicle exchange / tra / rental / tulsa	24300	7200	Thu J
22	2014	BMW	5 Series	528i	Sedan	automatic	wba5a5c51ed501631	ca	29	25969	black	black	financial services remarketing (lease)	34200	30000	Tue F
23	2014	Chevrolet	Camaro	LT	Convertible	automatic	2g1fb3d31e9134662	ca	NA	33450	black	black	avis rac/san leandro	20100	14700	Tue I
24	2015	Audi	A3	1.8 TFSI Premium	Sedan	automatic	wauxafgf7f1002327	ca	49	5826	gray	black	audi north scottsdale	24000	23750	Tue I
25	2014	BMW	6 Series	650i	Convertible	automatic	wbay9c57ed169262	ca	38	10736	black	black	the hertz corporation	67000	65000	Tue J

Name :- Priya Gupta
Roll no. :- S081

Sheth L.U.J. & Sir M.V. College

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Practical8.R Practical9.R Practical10.R car_prices S081.Priya.Rakesh.Gupta_titanic

Source on Save Run Source

```
1 # =====
2 # Creating New Variables (Transformations & Calculations)
3 # Dataset: Car Sales Data (based on screenshot)
4 #=====
5 library(dplyr)
6 library(tidyverse)
7
8
9 #=====
10 # 1. IMPORT & CLEANING
11 #=====
12 df <- read.csv("C:/Users/Priya Gupta/Downloads/car_prices.csv/car_prices.csv", na.strings = c("", "NA"))
13
14 # Replace NA numeric fields so calculations do not break
15 df_clean <- df %>%
16   mutate(
17     odometer = replace_na(odometer, 0),
18     condition = replace_na(condition, 0),
19     mmr = replace_na(mmr, 0),
20     sellingprice = replace_na(sellingprice, 0)
21   )
22
23
24 print("--- Cleaned Data Sample ---")
25 print(head(df_clean))
26
27 #=====
28 # 2. METHOD A: ARITHMETIC CALCULATIONS
29 #=====
30
31 # Scenario: Calculate difference between selling price and MMR value
32 df_calc <- df_clean %>%
33   mutate(
34     price_diff = sellingprice - mmr,          # Profit vs MMR
35     price_ratio = sellingprice / (mmr + 1)      # Ratio (Avoid divide-by-zero)
36   )
37
38 print("--- Method A Results (Price Calculations) ---")
39 print(df_calc %>% select(mmr, sellingprice, price_diff, price_ratio))
40
```

R Script

Console

14°C Clear Search Files Plots Packages Help Viewer Presentation ENG IN 23:38 01-12-2025

This screenshot shows the RStudio interface with the 'R Script' tab selected. The code in the script pane is for data cleaning and arithmetic calculations. It starts by reading a CSV file into 'df'. Then it creates a new dataset 'df_clean' by replacing NA values in numeric columns with 0. Following this, it calculates 'price_diff' (sellingprice - mmr) and 'price_ratio' (sellingprice / (mmr + 1)). Finally, it prints the cleaned data sample and the results of the arithmetic calculations.

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Practical8.R Practical9.R Practical10.R car_prices S081.Priya.Rakesh.Gupta_titanic

Source on Save Run Source

```
41 #=====
42 # 3. METHOD B: CONDITIONAL LOGIC
43 #=====
44
45 # Scenario 1: Condition score label
46 df_logic <- df_clean %>%
47   mutate(
48     Condition_Label = ifelse(condition >= 40, "Excellent",
49                             ifelse(condition >= 20, "Good", "Fair")),
50
51     # Scenario 2: High mileage indicator
52     Mileage_Status = ifelse(odometer > 15000, "High Mileage", "Low Mileage")
53   )
54
55 print("--- Method B Results (Logical Labels) ---")
56 print(df_logic %>% select(condition, Condition_Label, odometer, Mileage_Status))
57
58 #=====
59 # 4. METHOD C: TEXT TRANSFORMATION
60 #=====
61
62 # Scenario: Combine year/make/model into description
63 df_text <- df_clean %>%
64   mutate(
65     Car_Description = paste(year, make, model, "with", odometer, "miles"),
66     Sale_Info = paste("Sold on", saledate, "for $", sellingprice)
67   )
68
69 print("--- Method C Results (Descriptions) ---")
70 print(head(df_text$Car_Description))
71
72 #=====
73 # 5. FINAL WORKFLOW (ALL VARIABLES TOGETHER)
74 #=====
75
76 final_dataset <- df_clean %>%
77   mutate(
78     price_diff = sellingprice - mmr,
79     High_Value = ifelse(price_diff > 1000, TRUE, FALSE),
80     Summary = paste0()
81   )
82
```

R Script

Console

16°C Clear Search Files Plots Packages Help Viewer Presentation ENG IN 23:38 01-12-2025

This screenshot shows the continuation of the RStudio session. The script now includes a section for 'METHOD B: CONDITIONAL LOGIC'. It adds a 'Condition_Label' column based on the 'condition' value (40 or higher is 'Excellent', 20 or higher is 'Good', otherwise 'Fair'). It also adds a 'Mileage_Status' column indicating if the 'odometer' is greater than 15000 miles ('High Mileage') or not ('Low Mileage'). The next section, 'METHOD C: TEXT TRANSFORMATION', combines the 'year', 'make', and 'model' into a single 'Car_Description' and adds 'Sale_Info' (date and price). Finally, the 'final_dataset' is created by combining all variables and adding a 'High_Value' column (TRUE if price_diff is greater than 1000, otherwise FALSE).

Name :- Priya Gupta
Roll no. :- S081

Sheth L.U.J. & Sir M.V. College

The screenshot shows the RStudio interface with an R script open. The script contains code for data cleaning, transformation, and final workflow. It includes sections for creating new variables, importing datasets, and performing various operations like mutate, summarize, and paste. The right pane shows the environment browser with objects like car_prices, df_clean, and titanic_df listed.

```

# Scenario 2: High mileage indicator
# Mileage_Status = ifelse(odometer > 15000, "High Mileage", "Low Mileage")
# print("---- Method B Results (Logical Labels) ---")
# print(df_logic %>% select(condition, Condition_Label, odometer, Mileage_Status))
# =====#
# 4. METHOD C: TEXT TRANSFORMATION
# =====#
# Scenario: combine year/make/model into description
df_text <- df_clean %>%
  mutate(
    Car_Description = paste(year, make, model, "with", odometer, "miles"),
    Sale_Info = paste("Sold on", saledate, "for $", sellingprice)
  )
print("---- Method C Results (Descriptions) ---")
print(head(df_text$Car_Description))

# 5. FINAL WORKFLOW (ALL VARIABLES TOGETHER)
# =====#
final_dataset <- df_clean %>%
  mutate(
    price_diff = sellingprice - mmr,
    High_Value = ifelse(price_diff > 1000, TRUE, FALSE),
    Summary = paste0(
      make, " ", model, " | Cond: ", condition,
      " | Odo: ", odometer, " | Sold: $", sellingprice
    )
  )
print("---- Final Combined Dataset ---")
print(head(final_dataset))

```

The screenshot shows the RStudio interface with a terminal tab open. The terminal displays an R session with code for data cleaning and transformation. It includes imports for dplyr and tidyr, and a section for 1. IMPORT & CLEANING. The code reads a CSV file, replaces NA values, and prints the cleaned data sample. The right pane shows the environment browser with objects like R version 4.5.2 and a timestamp of 01-12-2025.

```

> #== Creating New Variables (Transformations & Calculations)
> # Dataset: Car Sales Data (based on screenshot)
> #=====#
>
> library(dplyr)
> library(tidyr)
>
> #=====#
> # 1. IMPORT & CLEANING
> #=====#
>
> df <- read.csv("C:/Users/Priya Gupta/downloads/car_prices.csv/car_prices.csv", na.strings = c("", "NA"))
>
> # Replace NA numeric fields so calculations do not break
> df_clean <- df %>%
  mutate(
    +   odometer = replace_na(odometer, 0),
    +   condition = replace_na(condition, 0),
    +   mmr = replace_na(mmr, 0),
    +   sellingprice = replace_na(sellingprice, 0)
  )
>
> print("---- Cleaned Data Sample ---")
[1] "---- Cleaned Data Sample ---"
> print(head(df_clean))
  year make           model     trim body transmission vtn state condition odometer
1 2015  Kia           Sorento    LX  SUV   automatic 5syktcad69fp66472  ca       5   16639
2 2015  Kia           Sorento    LX  SUV   automatic 5syktcad69fp661319  ca       5   9393
3 2015  BMW            3 Series 328i  SUEV Sedan   automatic 5y1612th4f1310987  ca      45  13282
4 2015  Volvo          S60      T5 Sedan   automatic yv1612th4f1310987  ca      41   14282
5 2014  BMW 6 Series Gran Coupe 650i Sedan   automatic wha6b2c57ed29731  ca      43   2641
6 2015 Nissan          Altima    2.5 S Sedan   automatic 1n4a13ap1fn26013  ca      1    3554
  Color interior seller mmr sellingprice
1 white black          kia motors america inc 20500  21500
2 white beige          kia motors america inc 20800  21500
3 gray  black financial services remarketing (lease) 31900  30000
4 white black          volvo na rep/world omni 27500  27750
5 gray  black financial services remarketing (lease) 66000  67000
6 gray  black enterprise vehicle exchange / tra / rental / tulsa 15350  10900

```

Name :- Priya Gupta
Roll no. :- S081

Sheth L.U.J. & Sir M.V. College

RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function | Addins | Project: (None)

```
Source  
Console Terminal Background Jobs  
R 4.5.2 - ~/  
1 Tue Dec 16 2014 12:30:00 GMT-0800 (PST)  
2 Tue Dec 16 2014 12:30:00 GMT-0800 (PST)  
3 Thu Jan 15 2015 04:30:00 GMT-0800 (PST)  
4 Thu Jan 29 2015 04:30:00 GMT-0800 (PST)  
5 Thu Dec 18 2014 12:30:00 GMT-0800 (PST)  
6 Tue Dec 30 2014 12:00:00 GMT-0800 (PST)  
>  
> #####  
> # 2. METHOD A: ARITHMETIC CALCULATIONS  
> #####  
>  
> # Scenario: Calculate difference between selling price and MMR value  
> df_calc <- df_clean %>%  
> mutate(  
>   price_diff = sellingprice - mmr,           # Profit vs MMR  
>   price_ratio = sellingprice / (mmr + 1)       # Ratio (avoid divide-by-zero)  
> )  
>  
> print("---- Method A Results (Price Calculations) ----")  
[1] "---- Method A Results (Price Calculations) ----"  
> print(df_calc %>% select(mmr, sellingprice, price_diff, price_ratio))  
  mmr sellingprice price_diff price_ratio  
1  20500     21500      1000  1.048793  
2  20800     21500      700  1.0336042  
3  31000     30000     -1900  0.940044  
4  27500     27750      250  1.0090542  
5  66000     67000      1000  1.0151361  
6  15350     10900     -4450  0.7100515  
7  69000     65000     -4000  0.9420153  
8  11900     98000     -2100  0.8234602  
9  32100     32250      150  1.0046416  
10 26300     17500     -8800  0.6653739  
11 47300     49750      2450  1.0517748  
12 15150     17700     -2550  1.1682397  
13 15350     12000     -3350  0.7817080  
14 20600     21500      900  1.0436387  
15 13900     10600     -3300  0.7625351  
16 14750     14100      -650  0.958674  
17 15200     4200     -11000  0.2762976  
18 37100     40000     2900  1.0781381
```

Finance headline
India reported 0... 23:41
ENG IN 01-12-2025

RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function | Addins | Project: (None)

```
Source  
Console Terminal Background Jobs  
R 4.5.2 - ~/  
21 21800     21000     -800  0.9812626  
213 16450     17500     1050  1.0637651  
214 22500     23750     1250  1.0555086  
215 23000     21000     -2000  0.9130038  
216 12250     12700      450  1.0366501  
217 15350     16500     1150  1.0748485  
218 21200     21400      200  1.0093863  
219 23600     25750     2150  1.0910555  
220 23300     25000     1700  1.0729153  
221 23900     22000     -1900  0.9204636  
222 17750     18200      450  1.0252943  
223 22600     18000     -4600  0.9642449  
224 22000     22000      1200  0.9742575  
225 25300     26250      950  1.0375084  
226 11500     11900      400  1.0346926  
227 23300     23000     -300  0.9870821  
228 27900     27500     -400  0.9856278  
229 36800     25000     -11800  0.6793294  
230 22600     26500      3900  1.1725145  
231 12000     12200      200  1.0165820  
232 11900     87000     -3200  0.7310310  
233 13150     108000    -2350  0.8212303  
234 22400     21750     -650  0.9709388  
235 23900     23500     -400  0.9832225  
236 23400     22000     -1400  0.9713068  
237 22000     45000     -6900  0.9472222  
238 23200     23000      300  1.0126874  
239 15050     16300     1250  1.0820845  
240 23700     22750     -950  0.9598751  
241 23800     24500      700  1.0293685  
242 15450     14900     -550  0.9643389  
243 23100     21000     -2100  0.9090516  
244 23000     24750     1750  1.0760402  
245 11650     84000     -3250  0.7209682  
246 23900     23500     -400  0.9832225  
247 22100     21000     -1100  0.9501832  
248 11400     94000     -2000  0.8244891  
249 26100     26000     -100  0.9961304  
250 21800     21400     -400  0.9816063  
[ reached 'max' / getOption("max.print") -- omitted 55857 rows ]
```

Finance headline
India reported 0... 23:41
ENG IN 01-12-2025

Name :- Priya Gupta
Roll no. :- S081

Sheth L.U.J. & Sir M.V. College

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Source

Console Terminal × Background Jobs ×

R 4.5.2 ~ /~

```
> #####  
> # 3. METHOD B: CONDITIONAL LOGIC  
> #####  
>  
> # Scenario 1: Condition_score label  
> df_logic <- df_clean %>%  
+ mutate(  
+   Condition_Label = ifelse(condition >= 40, "Excellent",  
+                             ifelse(condition >= 20, "Good", "Fair"))  
+  
+   # Scenario 2: High mileage indicator  
+   Mileage_Status = ifelse(odometer > 15000, "High Mileage", "Low Mileage")  
+ )  
> print("---- Method B Results (Logical Labels) ----")  
[1] "---- Method B Results (Logical Labels) ----"  
> print(df_logic %>% select(Condition_Label, odometer, Mileage_Status))  
  condition Condition_Label odometer Mileage_Status  
1           5          Fair 16639  Low Mileage  
2           5          Fair  9393  Low Mileage  
3          45        Excellent 1331  Low Mileage  
4          41        Excellent 14282  Low Mileage  
5          43        Excellent  2641  Low Mileage  
6           1          Fair  5554  Low Mileage  
7          34          Good 14943  Low Mileage  
8           2          Fair 28617  High Mileage  
9          42        Excellent  9557  Low Mileage  
10          3          Fair  489  Low Mileage  
11          48        Excellent 14414  Low Mileage  
12          48        Excellent 2034  Low Mileage  
13           2          Fair  5559  Low Mileage  
14           5          Fair 14634  Low Mileage  
15           0          Fair 15686  High Mileage  
16           2          Fair 11398  Low Mileage  
17           0          Fair  8311  Low Mileage  
18          49        Excellent  7983  Low Mileage  
19           7          Fair 13441  Low Mileage  
20          34          Good  8819  Low Mileage  
21           9          Fair 14538  Low Mileage  
22          29          Good 25969  High Mileage
```

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Source

Console Terminal × Background Jobs ×

R > R 4.5.2 - ~/

```
213 42 Excellent 19109 High Mileage
214 43 Excellent 26396 High Mileage
215 21 Good 23507 High Mileage
216 38 Good 34745 High Mileage
217 48 Excellent 10564 Low Mileage
218 47 Excellent 16132 High Mileage
219 47 Excellent 16551 High Mileage
220 44 Excellent 19551 High Mileage
221 44 Excellent 14486 Low Mileage
222 42 Excellent 17831 High Mileage
223 27 Good 26792 High Mileage
224 43 Excellent 19152 High Mileage
225 44 Excellent 19492 High Mileage
226 34 Good 50160 High Mileage
227 45 Excellent 19360 High Mileage
228 39 Good 12154 Low Mileage
229 43 Excellent 11564 Low Mileage
230 47 Excellent 25635 High Mileage
231 37 Good 39692 High Mileage
232 2 Fair 290000 High Mileage
233 48 Excellent 8559 Low Mileage
234 39 Good 26907 High Mileage
235 34 Good 14765 Low Mileage
236 43 Excellent 18673 High Mileage
237 0 Fair 37279 High Mileage
238 37 Good 20707 High Mileage
239 42 Excellent 8467 Low Mileage
240 44 Excellent 16009 High Mileage
241 4 Fair 15260 High Mileage
242 44 Excellent 9539 Low Mileage
243 36 Good 20976 High Mileage
244 46 Excellent 22924 High Mileage
245 2 Fair 44621 High Mileage
246 4 Fair 30556 High Mileage
247 41 Excellent 29731 High Mileage
248 1 Fair 36957 High Mileage
249 44 Excellent 13321 Low Mileage
250 36 Good 6552 Low Mileage
[ reached 'max' / getOption("max.print") -- omitted 558587 rows ]
```

Name :- Priya Gupta
Roll no. :- S081

Sheth L.U.J. & Sir M.V. College

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Project: (None)

Source

Console Terminal × Background Jobs ×

R - R 4.5.2 - ~

```
> # -----
> # 4. METHOD C: TEXT TRANSFORMATION
> # -----
> #
> # Scenario: Combine year/make/model into description
> df_text <- df_clean %>%
+   mutate(
+     Car_Description = paste(year, make, model, "with", odometer, "miles"),
+     Sale_Info = paste("Sold on", salename, "for $", sellingprice)
+   )
>
> print("---- Method C Results (Descriptions) ----")
[1] "---- Method C Results (Descriptions) ----"
> print(head(df_text$Car_Description))
[1] "2015 Kia Sorento with 16639 miles"           "2015 Kia Sorento with 9393 miles"
[3] "2014 BMW 3 Series with 1331 miles"           "2015 Volvo S60 with 14282 miles"
[5] "2014 BMW 6 Series Gran Coupe with 2641 miles" "2015 Nissan Altima with 5554 miles"
>
> # -----
> # 5. FINAL WORKFLOW (ALL VARIABLES TOGETHER)
> #
>
> final_dataset <- df_clean %>%
+   mutate(
+     price_diff = sellingprice - mmr,
+     High_Value = ifelse(price_diff > 1000, TRUE, FALSE),
+     Summary = paste0(
+       make, " ", model, " | Cond: ", condition,
+       " | Odo: ", odometer, " | Sold: $", sellingprice
+     )
+   )
>
> print("---- Final Combined Dataset ---")
[1] "---- Final Combined Dataset ---"
> print(head(final_dataset))
  year make model trim body transmission vin state condition odometer
1 2015  Kia  Sorento  LX  SUV  automatic 5yxktca60fg566472  ca      5    16639
2 2015  Kia  Sorento  LX  SUV  automatic 5yxktca60fg561319  ca      5     9393
3 2014  BMW  3 Series 328i SULEV Sedan  automatic wba3lc1c1ek116351  ca     45    1331
4 2015  Volvo S60   TS  Sedan  automatic yf1612tb4f1310987  ca     41    14282
5 2014  RMW 6 Series Gran Coupe 650i Sedan  automatic whafib2c57ed129731  ca     43    7641
```

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins ▾

Project: (None)

Source

Console Terminal ▾ Background Jobs ▾

```
R R 4.5.2 ~/...
```

```
+ price_diff = sellingprice - mmr,
+ High_Value = ifelse(price_diff > 1000, TRUE, FALSE),
+ Summary = paste0(
+   make, " ", model, " | Cond: ", condition,
+   " | Odo: ", odometer, " | Sold: $", sellingprice
+ )
+ )
>
```

```
> print("---- Final Combined Dataset ----")
[1] "---- Final Combined Dataset ----"
> print(head(final_dataset))
#> #> #> #> #> #>
year make model trim body transmission vin state condition odometer
1 2015 Kia Sorento LX SUV automatic 5xkytca69fg566472 ca 5 16639
2 2015 Kia Sorento LX SUV automatic 5xkytca69fg561319 ca 5 9393
3 2014 BMW 3 Series 328i Sedan automatic wba3c1c516357 ca 45 1331
4 2015 Volvo S60 T5 Sedan automatic wba62c57ed29731 ca 41 14282
5 2014 BMW 6 Series Gran Coupe 650i Sedan automatic wba6b2c57ed29731 ca 43 2641
6 2015 Nissan Altima 2.5 S Sedan automatic 1n4a13apn1f26013 ca 1 5554
#> #> #> #> #> #>
color interior seller mmr sellingprice
1 white black kia motors america inc 20500 21500
2 white beige kia motors america inc 20800 21500
3 gray black financial services remarketing (lease) 31900 30000
4 white black volvo na rep/world omni 27500 27750
5 gray black financial services remarketing (lease) 66000 67000
6 gray black enterprise vehicle exchange / tra / rental / tulsa 15350 10900
#> #> #> #> #> #>
1 Tue Dec 16 2014 12:30:00 GMT-0800 (PST) -19000 FALSE
2 Tue Dec 16 2014 12:30:00 GMT-0800 (PST) -700 FALSE
3 Thu Jan 15 2015 04:30:00 GMT-0800 (PST) -19000 FALSE
4 Thu Jan 29 2015 04:30:00 GMT-0800 (PST) -250 FALSE
5 Thu Dec 18 2014 12:30:00 GMT-0800 (PST) 1000 FALSE
6 Tue Dec 30 2014 12:00:00 GMT-0800 (PST) -4450 FALSE
#> #> #> #> #> #>
Summary
1 Kia Sorento | Cond: 5 | Odo: 16639 | Sold: $21500
2 Kia Sorento | Cond: 5 | Odo: 9393 | Sold: $21500
3 BMW 3 Series | Cond: 45 | Odo: 1331 | Sold: $30000
4 Volvo S60 | Cond: 41 | Odo: 14282 | Sold: $27750
5 BMW 6 Series Gran Coupe | Cond: 43 | Odo: 2641 | Sold: $67000
6 Nissan Altima | Cond: 1 | Odo: 5554 | Sold: $10900
#> #> #> #> #> #>
```

Name :- Priya Gupta
Roll no. :- S081

Sheth L.U.J. & Sir M.V. College

Name :- Priya Gupta

Roll no. :- S081