

SHETH L.U.J AND SIR MV COLLEGE
PRACTICAL NO:- 07

AIM :-Selecting and dropping variables using select() in R. import dataset.

CODE:-

```
library(dplyr)
housing <- read.csv("C:/Users/IT-29/Downloads/housing (2).csv")
print("--- Original Dataset (First 3 rows) ---")
print(head(housing, 3))
-
selected_cols <- housing %>%
  select(Price, Avg..Area.Income, Avg..Area.Number.of.Rooms)

print("--- Selected Specific Columns ---")
print(head(selected_cols, 3))
range_cols <- housing %>%
  select(Avg..Area.Income:Avg..Area.Number.of.Bedrooms)
print("--- Selected Range of Columns ---")
print(head(range_cols, 3))
starts_with_avg <- housing %>%
  select(starts_with("Avg"))
print("--- Columns starting with 'Avg' ---")
print(head(starts_with_avg, 3))

dropped_one <- housing %>%
  select(-Address)

print("--- Dataset with 'Address' dropped ---")
print(names(dropped_one))

# Method B: Drop multiple columns (Avg.Area.House.Age, Avg.Area.Number.of.Bedrooms)
dropped_multiple <- housing %>%
  select(-Avg..Area.House.Age, -Avg..Area.Number.of.Bedrooms)

print("--- Dataset with multiple columns dropped ---")
print(names(dropped_multiple))

dropped_range <- housing %>%
  select(-(Avg..Area.House.Age:Area.Population))

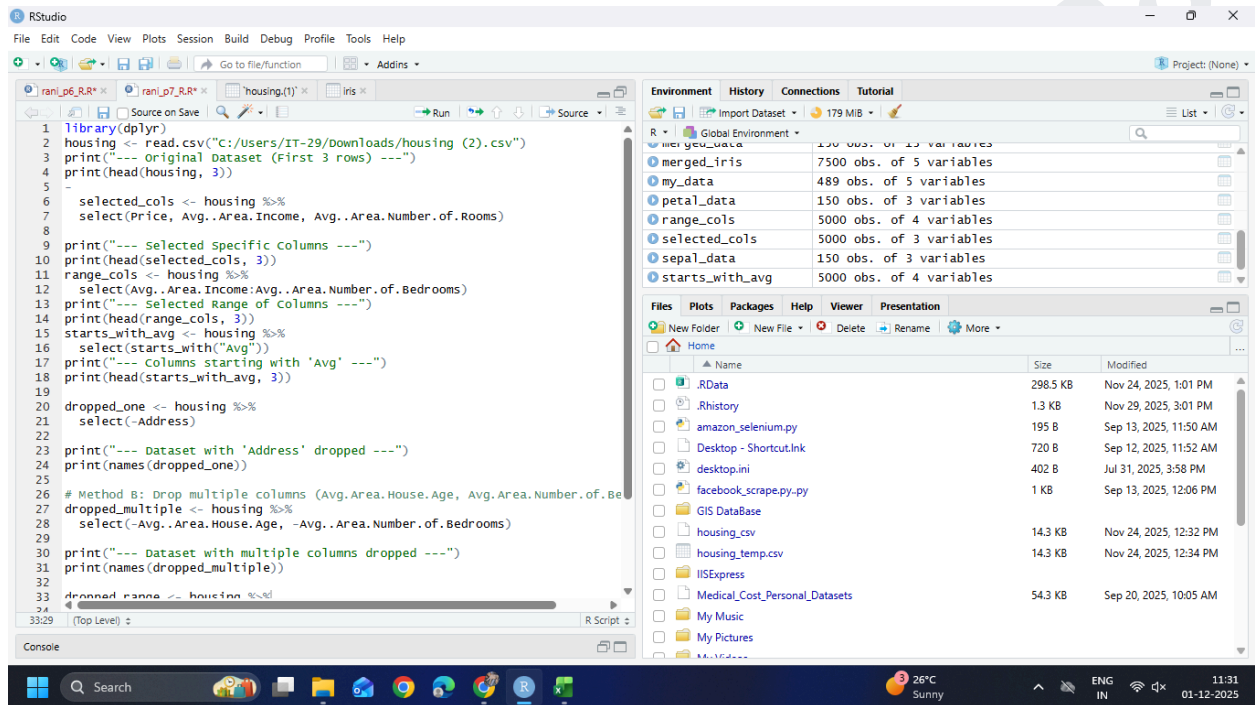
print("--- Dataset with range of columns dropped ---")
```

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```
print(names(dropped_range))  
print("PRACTICAL 7 COMPLETED SUCCESSFULLY.")
```

OUTPUT:-



The screenshot displays the RStudio interface with the following components:

- Source Editor:** Contains R code for data manipulation using the `dplyr` package. The code reads a CSV file, prints the first 3 rows, selects specific columns, and drops multiple columns.
- Environment Pane:** Lists the objects created in the R session:

Object	Dimensions
merged_iris	150 obs. of 13 variables
my_data	489 obs. of 5 variables
petal_data	150 obs. of 3 variables
range_cols	5000 obs. of 4 variables
selected_cols	5000 obs. of 3 variables
sepal_data	150 obs. of 3 variables
starts_with_avg	5000 obs. of 4 variables
- Files Pane:** Shows the file explorer with various files and folders, including `housing.csv` and `housing_temp.csv`.
- Console:** Displays the output of the R code, showing the names of the datasets after dropping columns.

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```
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 - ~/
> source("~/rani_p7.R.R")
[1] "--- Original Dataset (First 3 rows) ---"
Avg..Area.Income Avg..Area.House.Age Avg..Area.Number.of.Rooms
1 79545.46 5.682861 7.009188
2 79248.64 6.002900 6.730821
3 61287.07 5.865890 8.512727
Avg..Area.Number.of.Bedrooms Area.Population Price
1 4.09 23086.80 1059034
2 3.09 40173.07 1505891
3 5.13 36882.16 1058988
Address
1 208 Michael Ferry Apt. 674\NLaurebury, NE 37010-5101
2 188 Johnson Views Suite 079\NLake Kathleen, CA 48958
3 9127 Elizabeth Stravenue\NDanielstown, WI 06482-3489
[1] "--- Selected Specific Columns ---"
Price Avg..Area.Income Avg..Area.Number.of.Rooms
1 1059034 79545.46 7.009188
2 1505891 79248.64 6.730821
3 1058988 61287.07 8.512727
[1] "--- Selected Range of Columns ---"
Avg..Area.Income Avg..Area.House.Age Avg..Area.Number.of.Rooms
1 79545.46 5.682861 7.009188
2 79248.64 6.002900 6.730821
3 61287.07 5.865890 8.512727
Avg..Area.Number.of.Bedrooms
1 4.09
2 3.09
3 5.13
[1] "--- Columns starting with 'Avg' ---"
Avg..Area.Income Avg..Area.House.Age Avg..Area.Number.of.Rooms
1 79545.46 5.682861 7.009188
2 79248.64 6.002900 6.730821
3 61287.07 5.865890 8.512727
Avg..Area.Number.of.Bedrooms
1 4.09
2 3.09
3 5.13
```

```
RStudio
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Project: (None)

Source
Console Terminal Background Jobs
R - R 4.5.2 - ~/
[1] Price Avg..Area.Income Avg..Area.Number.of.Rooms
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2 1505891 79248.64 6.730821
3 1058988 61287.07 8.512727
[1] "--- Selected Range of Columns ---"
Avg..Area.Income Avg..Area.House.Age Avg..Area.Number.of.Rooms
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3 61287.07 5.865890 8.512727
Avg..Area.Number.of.Bedrooms
1 4.09
2 3.09
3 5.13
[1] "--- Columns starting with 'Avg' ---"
Avg..Area.Income Avg..Area.House.Age Avg..Area.Number.of.Rooms
1 79545.46 5.682861 7.009188
2 79248.64 6.002900 6.730821
3 61287.07 5.865890 8.512727
Avg..Area.Number.of.Bedrooms
1 4.09
2 3.09
3 5.13
[1] "--- Dataset with 'Address' dropped ---"
[1] "Avg..Area.Income" "Avg..Area.House.Age"
[3] "Avg..Area.Number.of.Rooms" "Avg..Area.Number.of.Bedrooms"
[5] "Area.Population" "Price"
[1] "--- Dataset with multiple columns dropped ---"
[1] "Avg..Area.Income" "Avg..Area.Number.of.Rooms"
[3] "Area.Population" "Price"
[5] "Address"
[1] "--- Dataset with range of columns dropped ---"
[1] "Avg..Area.Income" "Price"
[3] "Address"
[1] "PRACTICAL 7 COMPLETED SUCCESSFULLY."
```

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