

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))

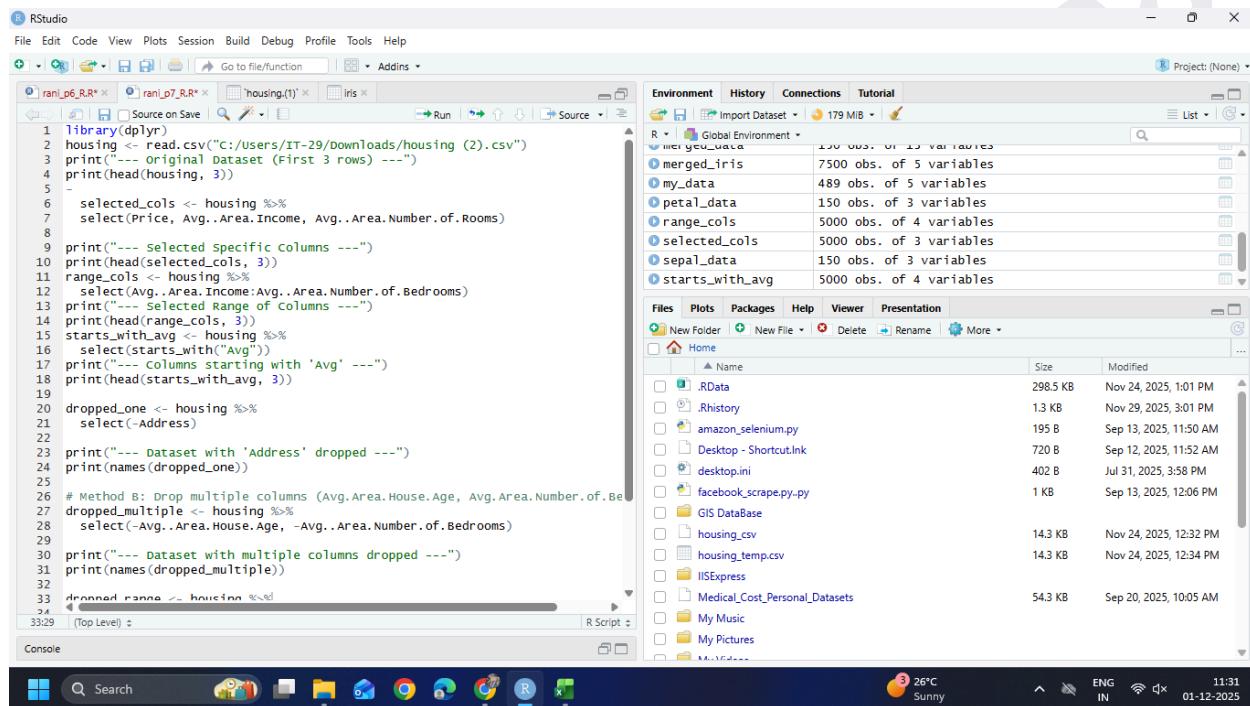
dropped_range <- housing %>%
  select(-(Avg..Area.House.Age:Area.Population))

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

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

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

OUTPUT:-



The screenshot shows the RStudio interface. The left pane displays an R script named 'rani_p7.R' with the following 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(-c(Address, Avg..Area.House.Age, Avg..Area.Number.of.Bedrooms))
```

The right pane shows the 'Environment' tab with various objects listed:

Object	Description
mei_yew_data	150 obs. of 15 variables
merged_iris	7500 obs. of 5 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

The bottom right corner of the screen shows system status: 26°C, Sunny, ENG IN, 11:31, 01-12-2025.

SHETH L.U.J AND SIR MV COLLEGE

PRACTICAL NO:- 07

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Console Terminal Background Jobs

```
> > source("~/rani1_p7.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 Avg..Area.Population Price

	Avg..Area.Number.of.Bedrooms	Avg..Area.Population	Price
1	4.09	23086.80	1059034
2	3.09	40173.07	1505891
3	5.13	36882.16	1058988

Address

	Avg..Area.Income	Avg..Area.House.Age	Avg..Area.Number.of.Rooms
1	1059034	79545.46	7.009188
2	1505891	79248.64	6.730821
3	1058988	61287.07	8.512727

--- 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

	Avg..Area.Number.of.Bedrooms
1	4.09
2	3.09
3	5.13

--- 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

	Avg..Area.Number.of.Bedrooms
1	4.09
2	3.09
3	5.13

--- 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"           "Address"
[1] "PRACTICAL 7 COMPLETED SUCCESSFULLY."
```

Environment History Connections Tutorial

Project: (None)

Files Plots Packages Help Viewer Presentation

Home

26°C Sunny ENG IN 11:24 01-12-2025

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Console Terminal Background Jobs

```
> > source("~/rani1_p7.R")
```

Price Avg..Area.Income Avg..Area.Number.of.Rooms

	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

--- Selected Range of Columns ---

	Price	Avg..Area.Income	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

	Avg..Area.Number.of.Bedrooms
1	4.09
2	3.09
3	5.13

--- 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"           "Address"
[1] "PRACTICAL 7 COMPLETED SUCCESSFULLY."
```

Environment History Connections Tutorial

Project: (None)

Files Plots Packages Help Viewer Presentation

Home

26°C Sunny ENG IN 11:25 01-12-2025