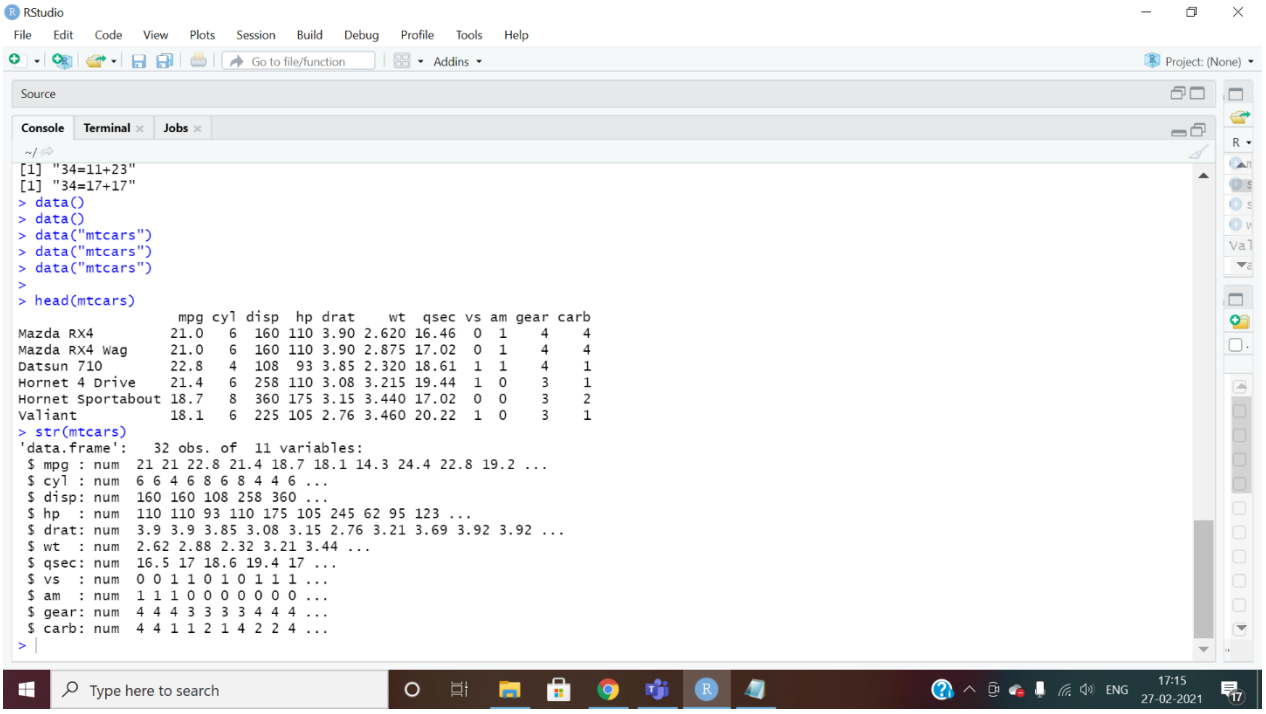
In this study , we will use mtcars datasets.

Q1)Print the strcture of the dataset

Answer:

```
data("mtcars")
head(mtcars)
str(mtcars)
```

OUTPUT

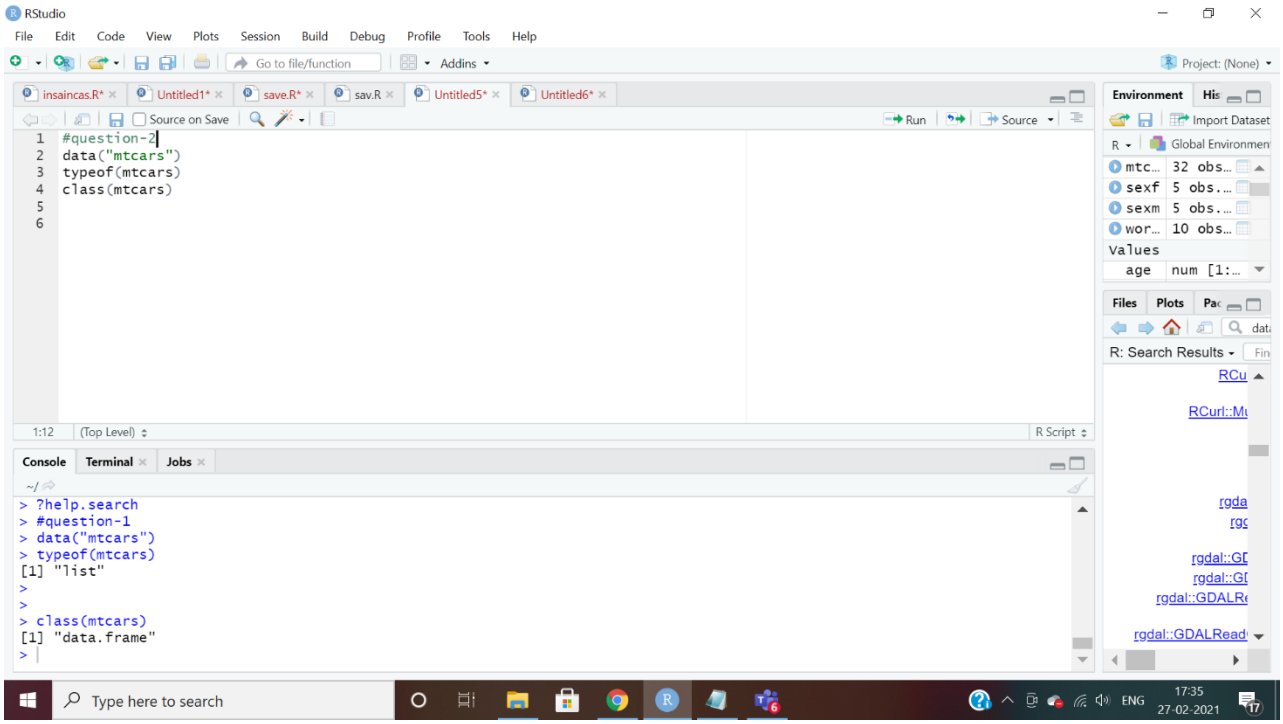


Q2) What is the datatype of the datset?

Answer:

```
data("mtcars")
typeof(mtcars)
class(mtcars)
```

OUTPUT

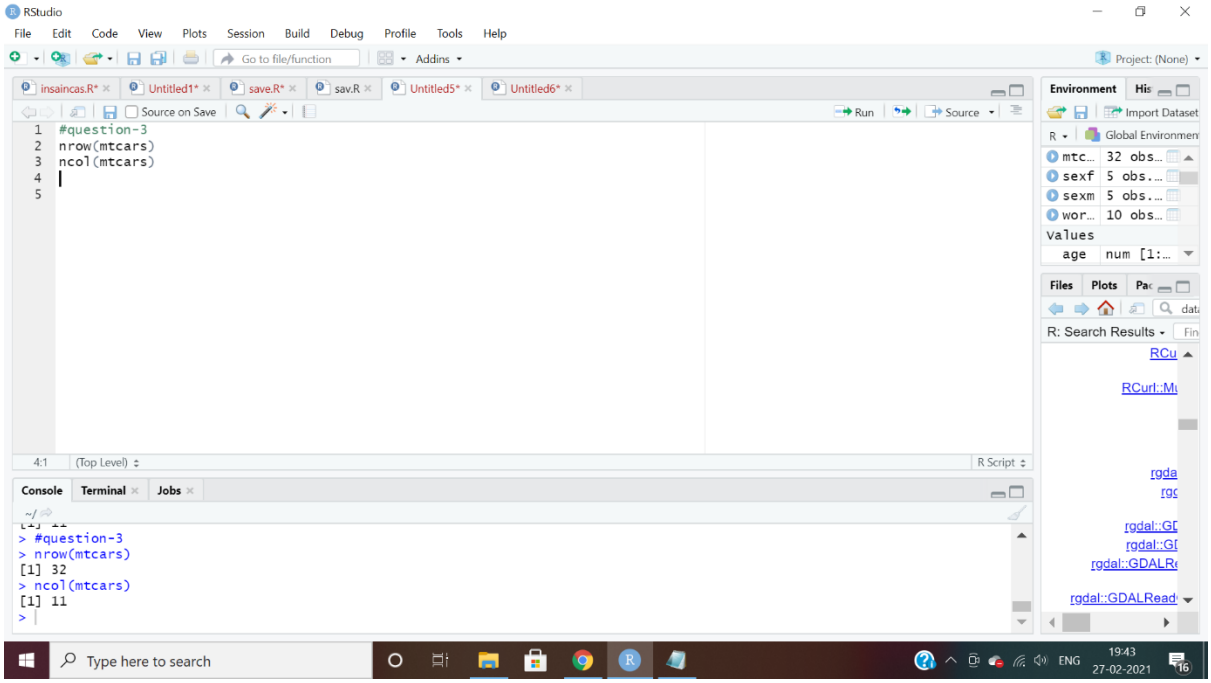


Q3) How many colmns and rows are there in the dataset??

Answer:

nrow(mtcars)
ncol(mtcars)

OUTPUT



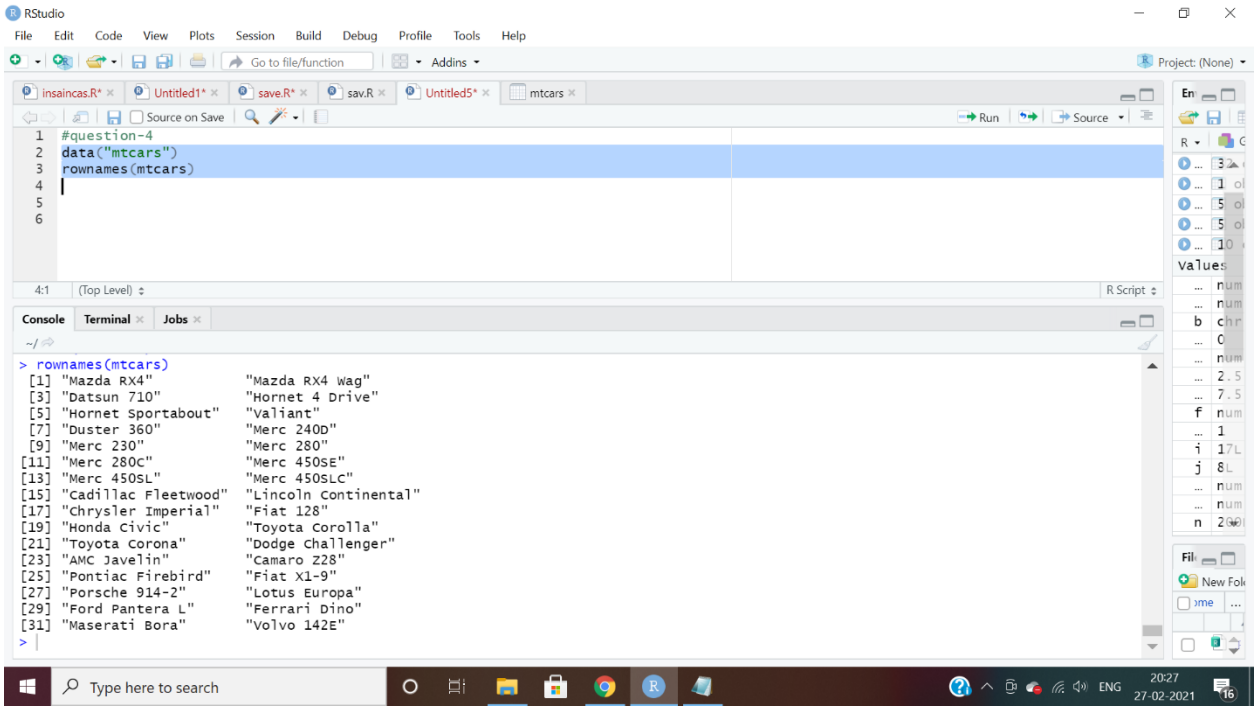
Q4) Print the row names

Answer:

data("mtcars")

rownames(mtcars)

OUTPUT



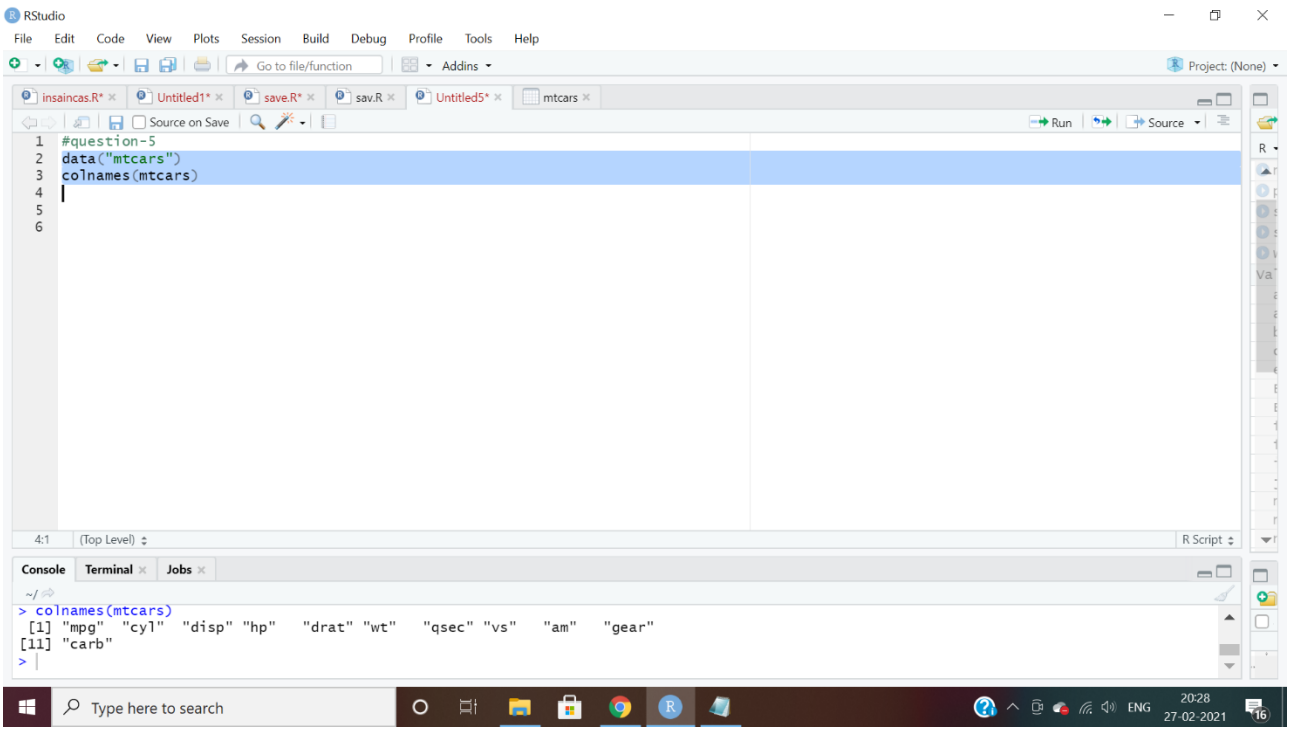
Q5) Print the column names

Answer:

data("mtcars")

colnames(mtcars)

OUTPUT

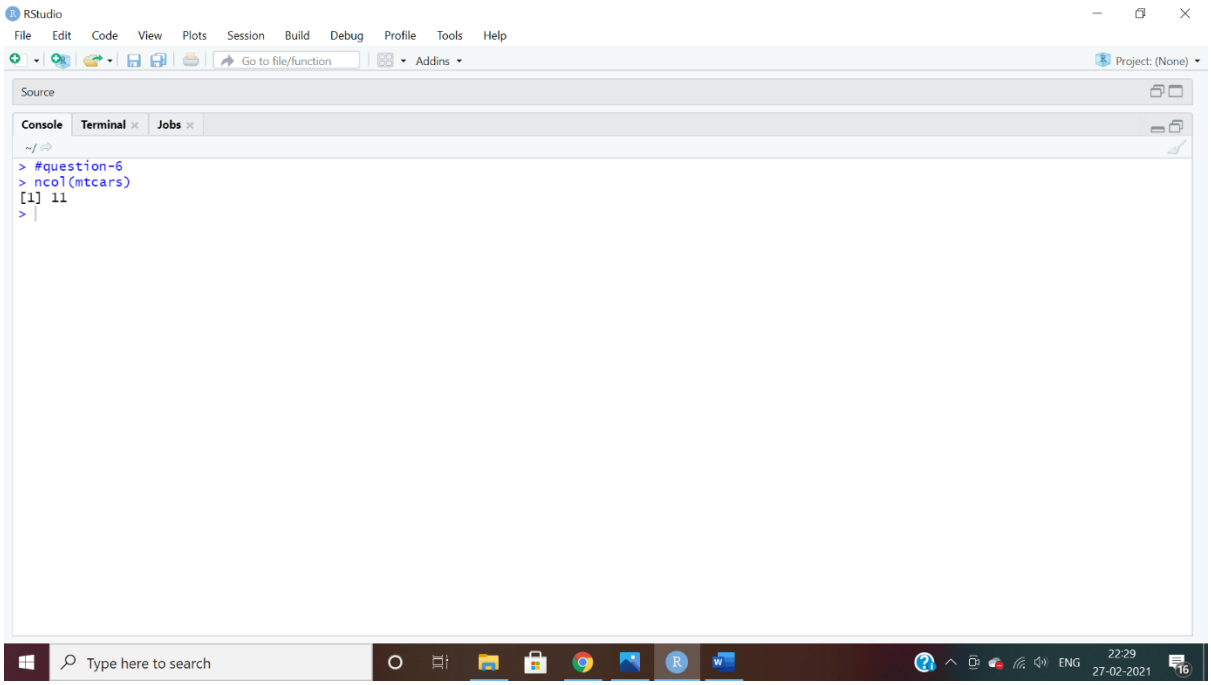


Q6) Print the number of columns in mtcars

Answer:

ncol(mtcars)

OUTPUT

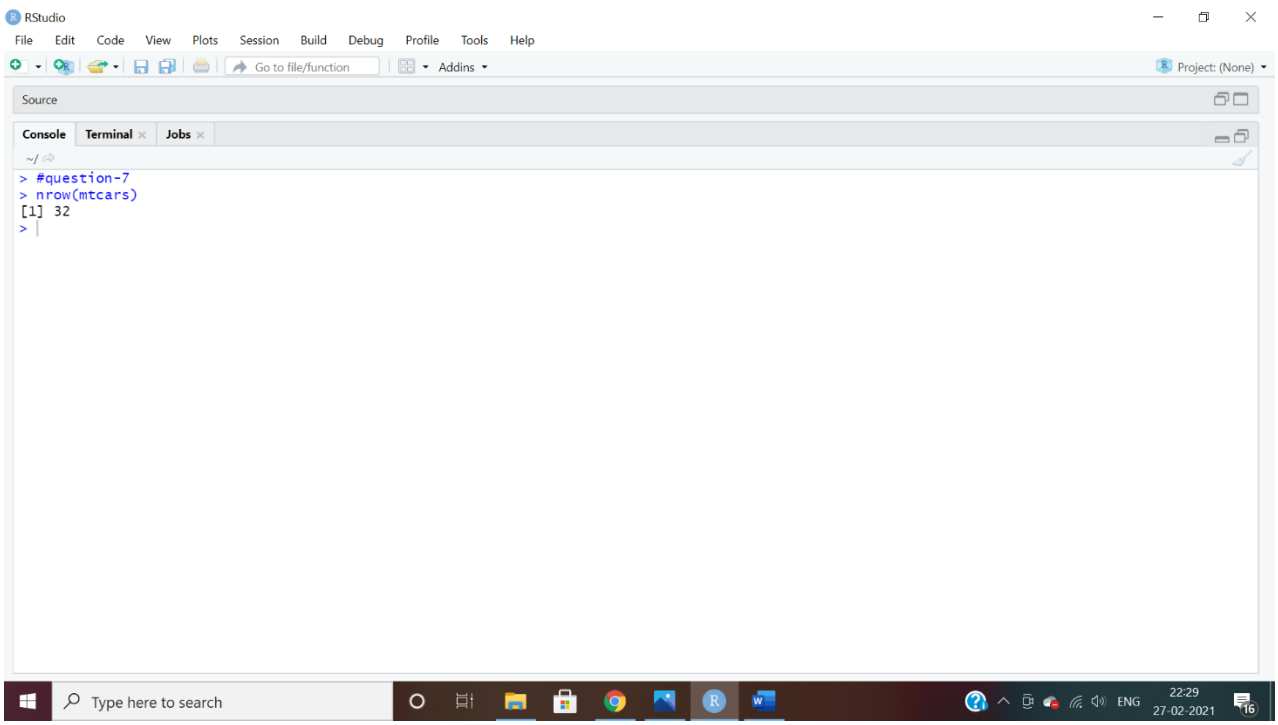


Q7) Print the number of rows

Answer:

nrow(mtcars)

OUTPUT

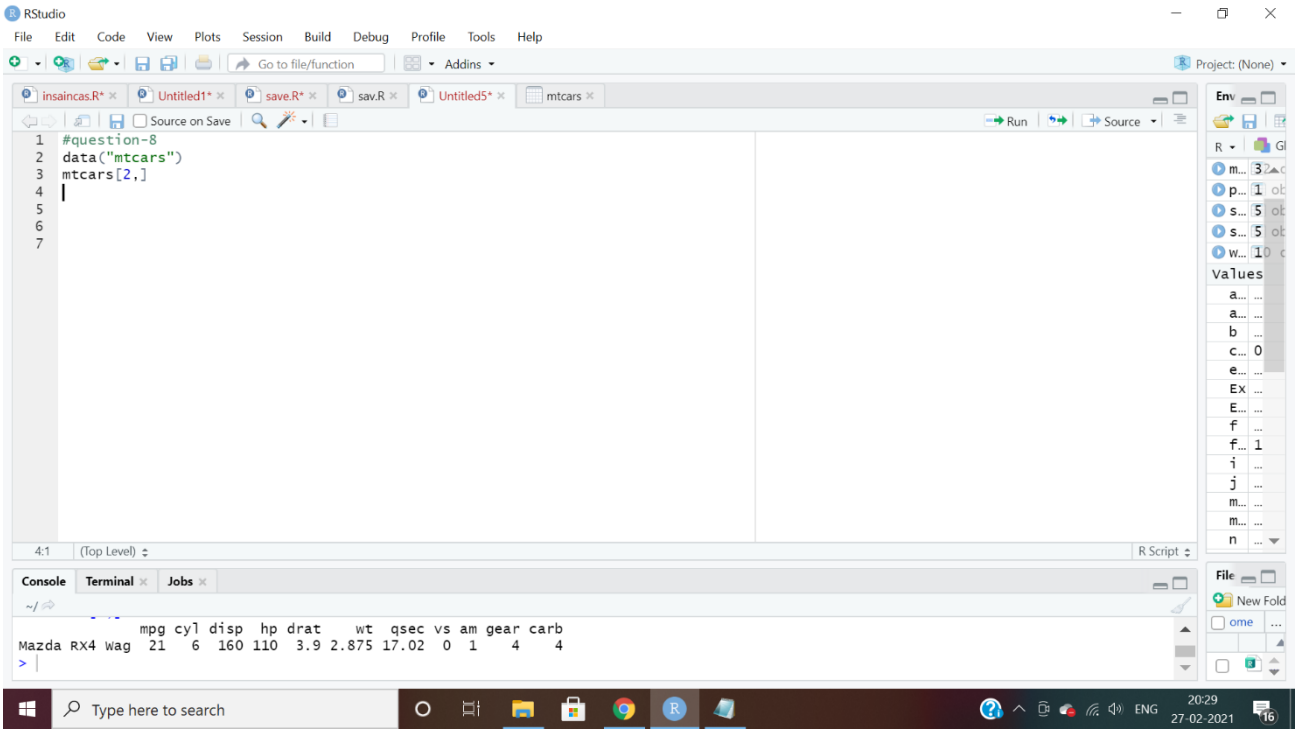


Q8) Print all the elements of 2nd row

Answer:

```
data("mtcars")
mtcars[2,]
```

OUTPUT

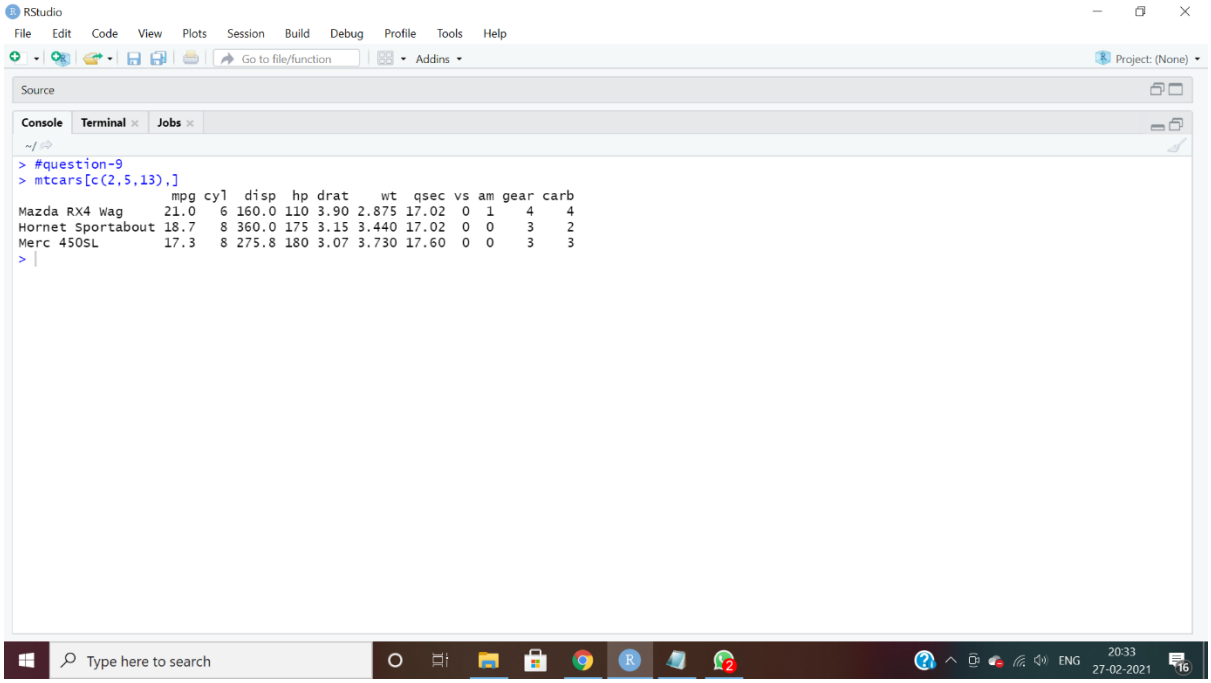


Q9) Print all the elements of 2nd, 5th and 13th row

Answer:

```
mtcars[c(2,5,13),]
```

OUTPUT

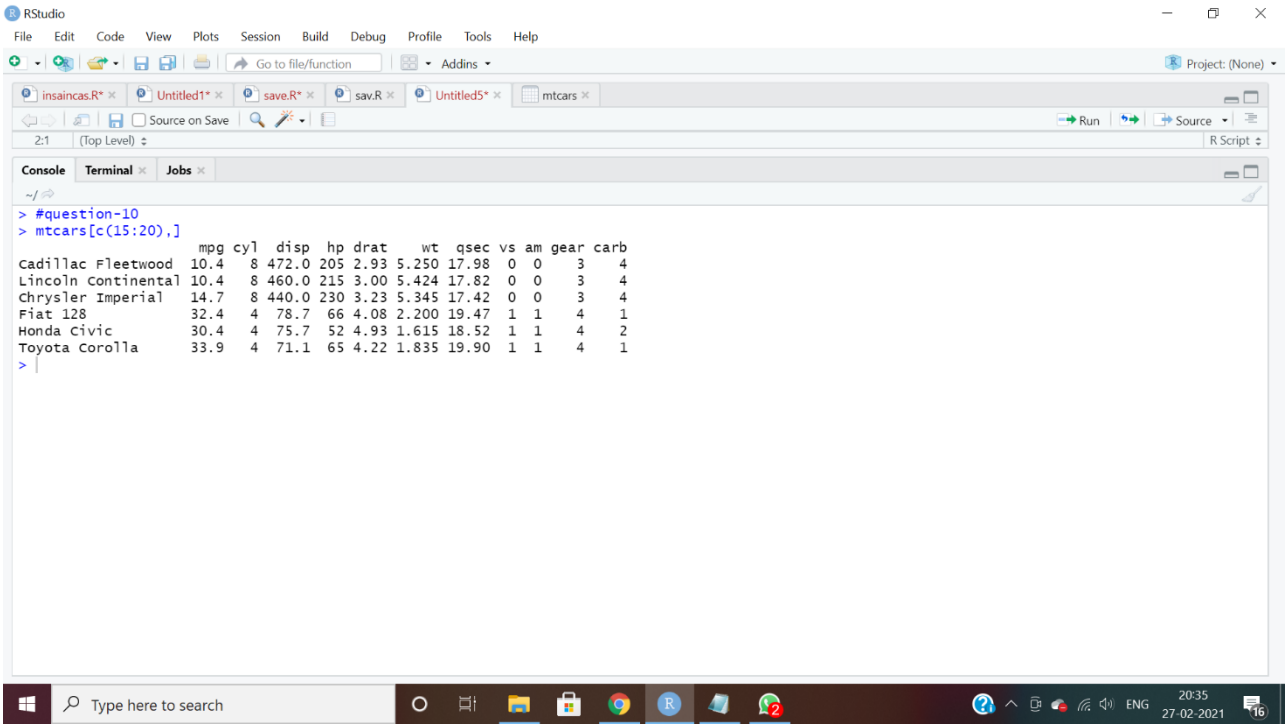


Q10) Print the elements of rows from 15 to 20

Answer:

mtcars[c(15:20),]

OUTPUT

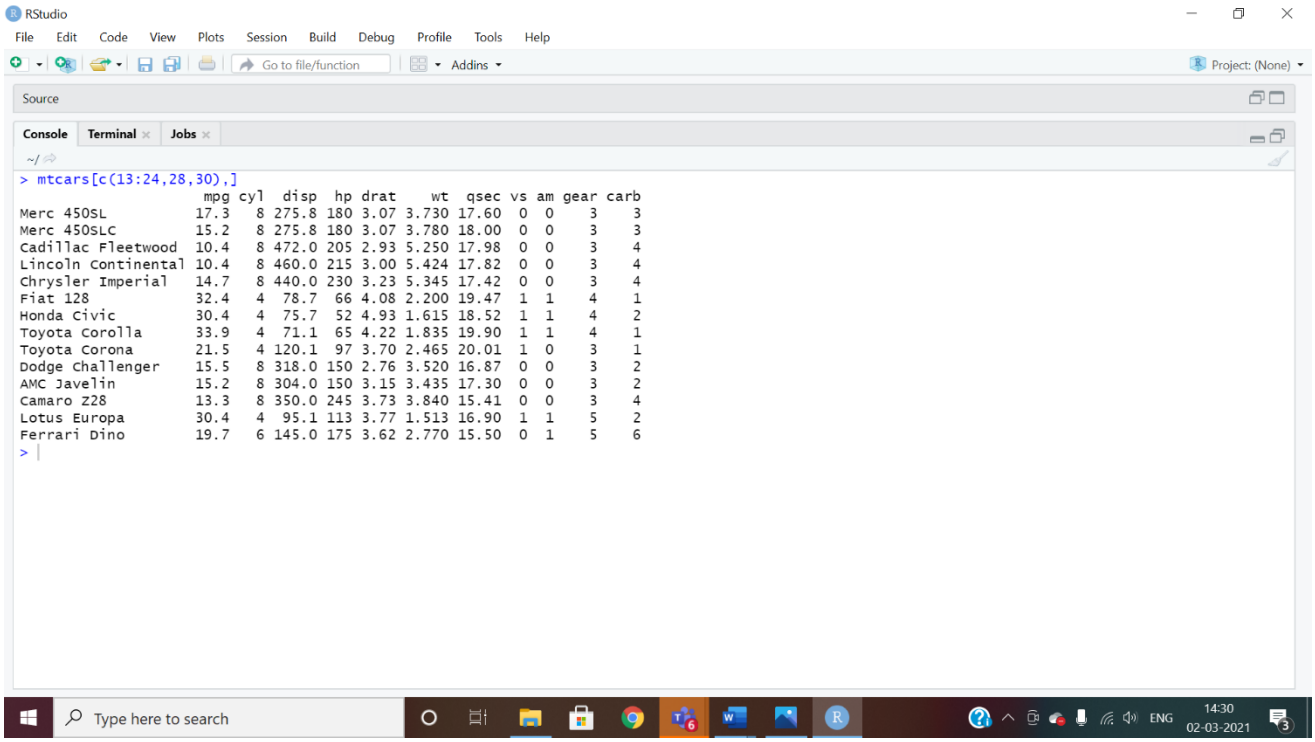


Q11) Print the elements of rows from 13 to 24, 28 and 30

Answer:

```
mtcars[c(13:24,28,30),]
```

OUTPUT

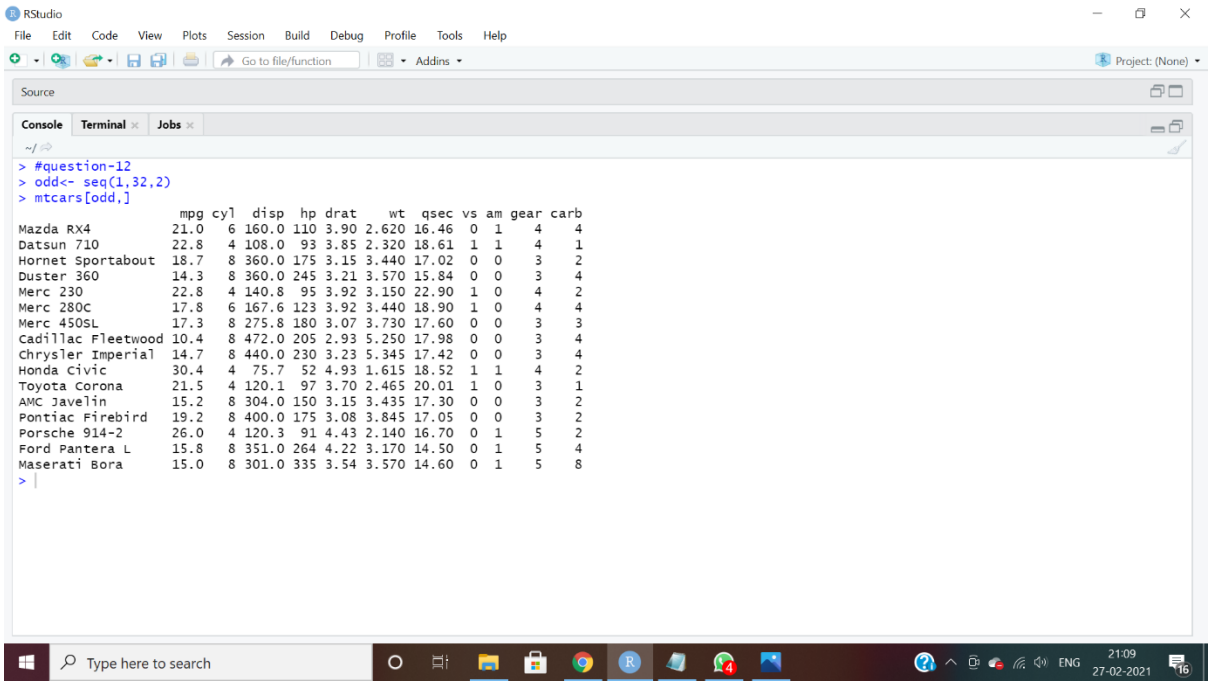


Q12) Print all odd indexed rows (rows 1,3,5,...)

Answer:

```
odd<-seq(1,nrow(mtcars),2)
mtcars[odd,]
```

OUTPUT



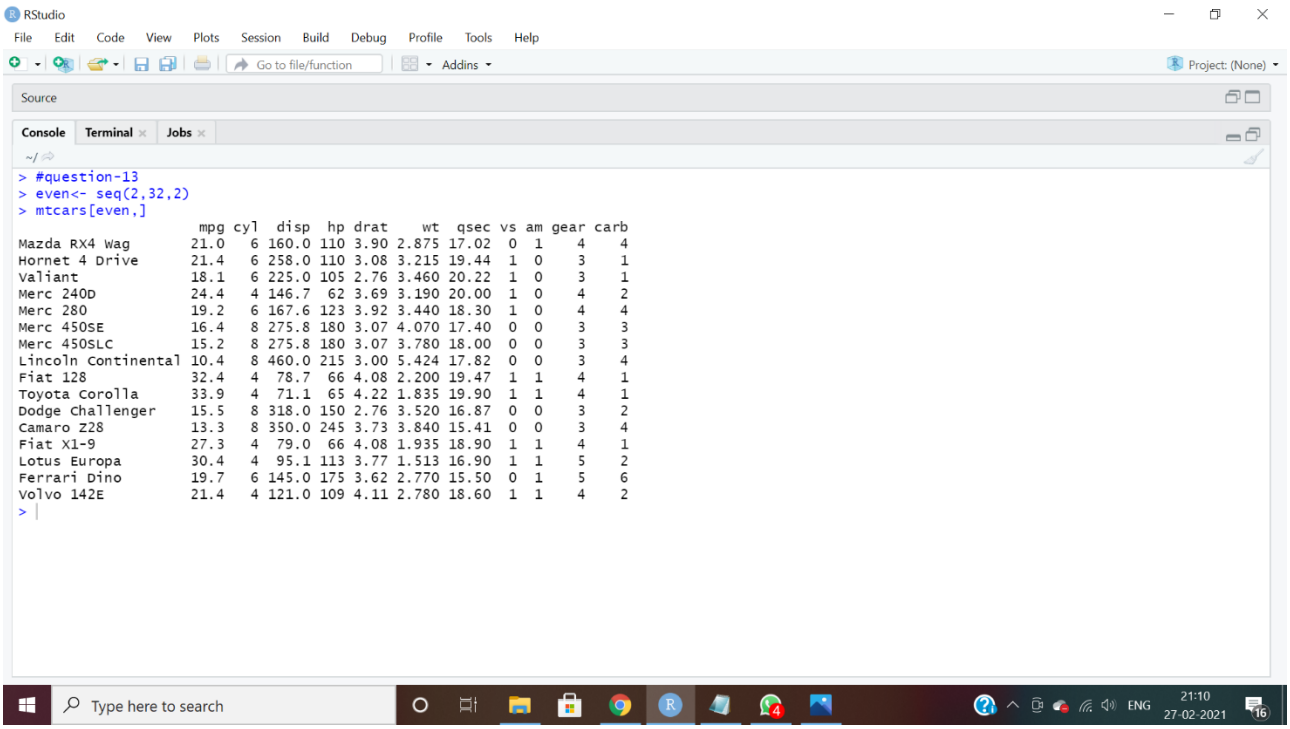
Q13) Print all even indexed rows (rows 2,4,6,...)

Answer:

```
even <- seq(2,nrow(mtcars),2)

mtcars[even,]
```

OUTPUT



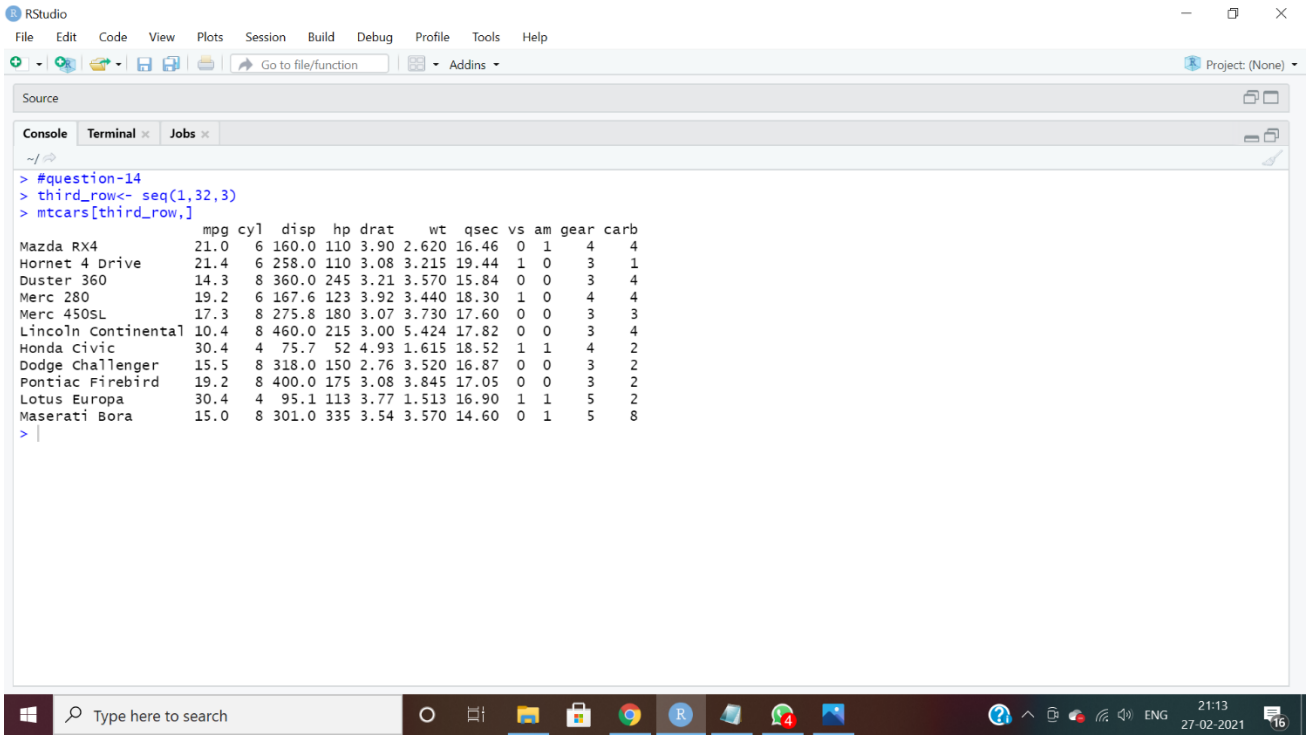
Q14) Print every 3rd row from 1st row (1,4,7,10..)

Answer:

third_row<- seq(1,nrow(mtcars),3)

mtcars[third_row,]

OUTPUT

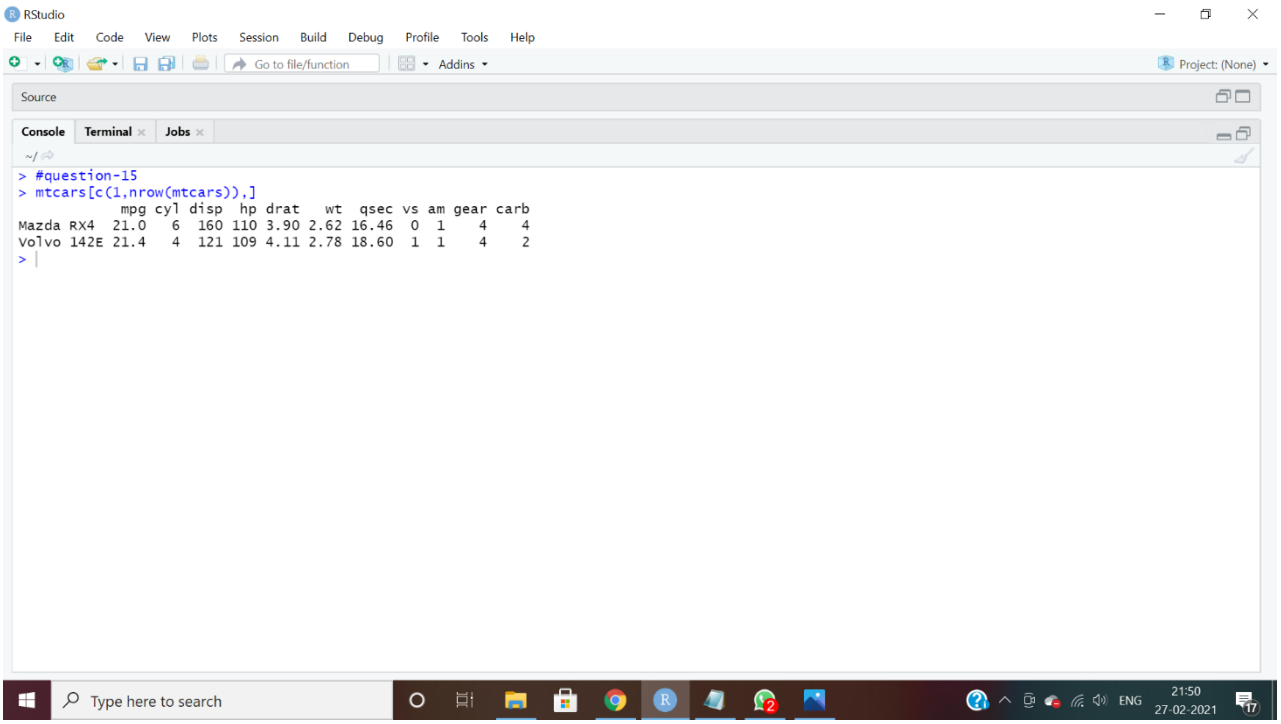


Q15) Print first row and last row

Answer:

mtcars[c(1,nrow(mtcars)),]

OUTPUT

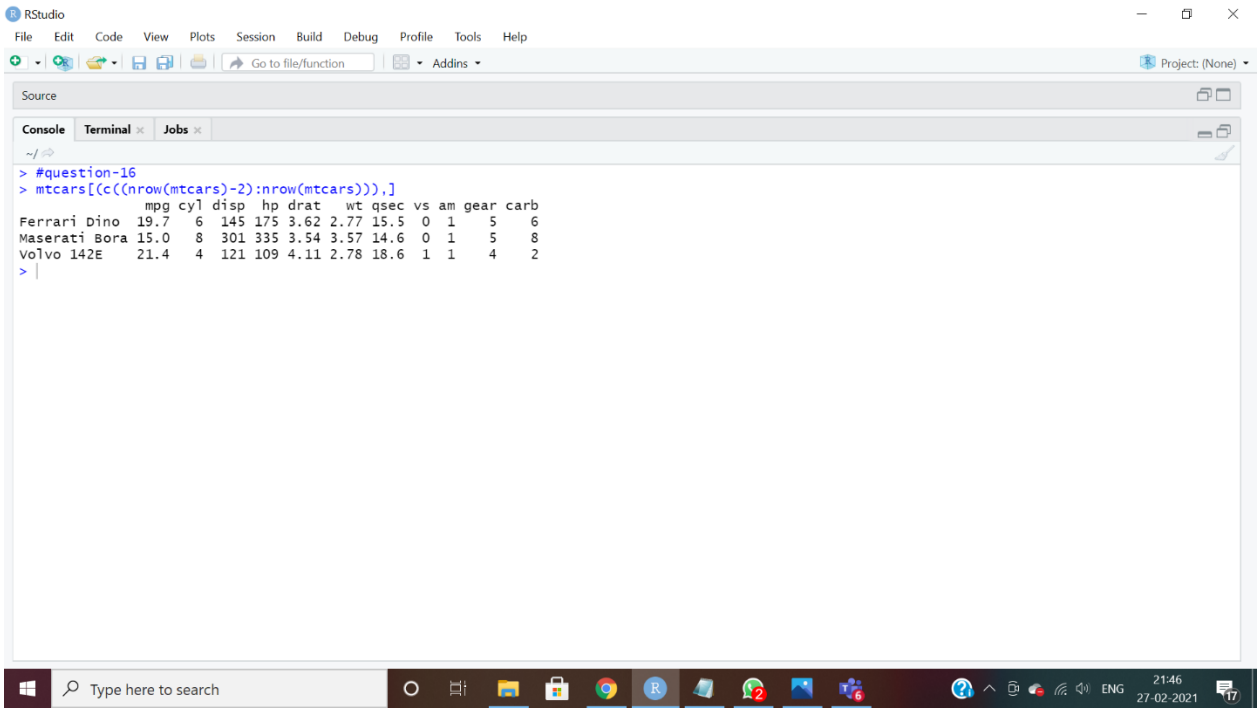


Q16) Print last 3 rows without using tail() function

Answer:

mtcars[(c((nrow(mtcars)-2):nrow(mtcars))),]

OUTPUT

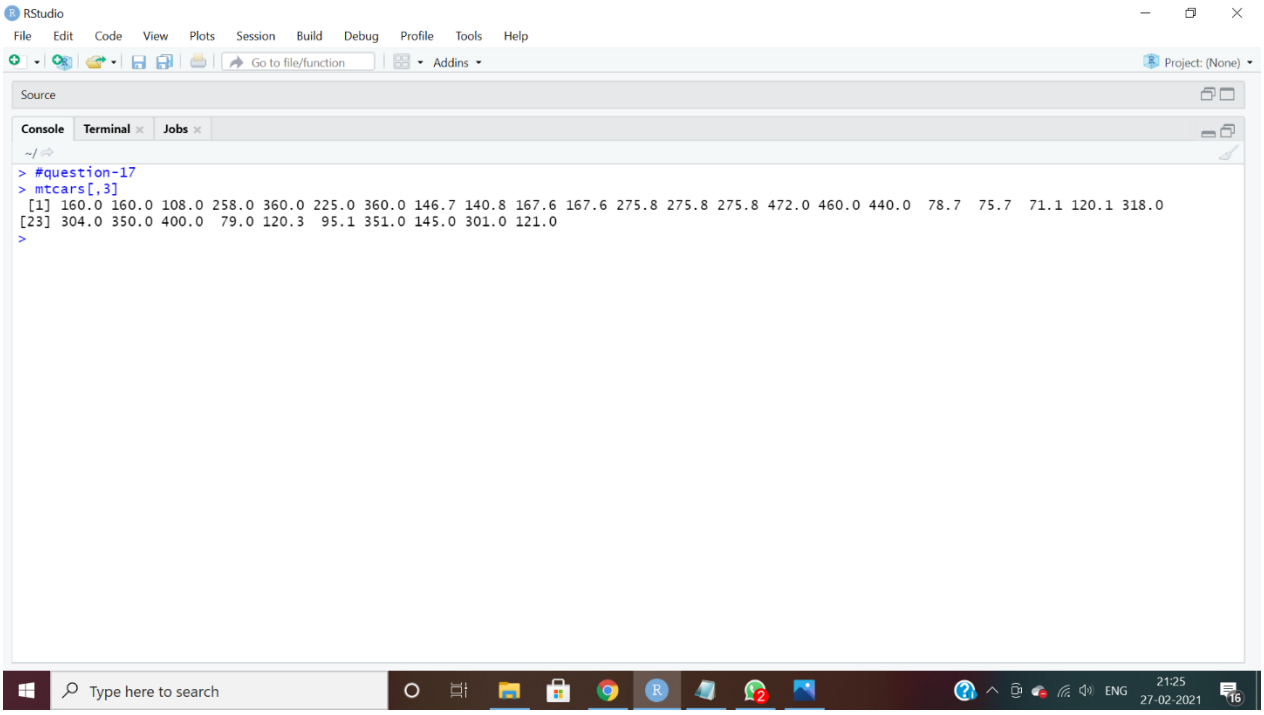


Q17) Print the elements of 3rd column

Answer:

mtcars[,3]

OUTPUT

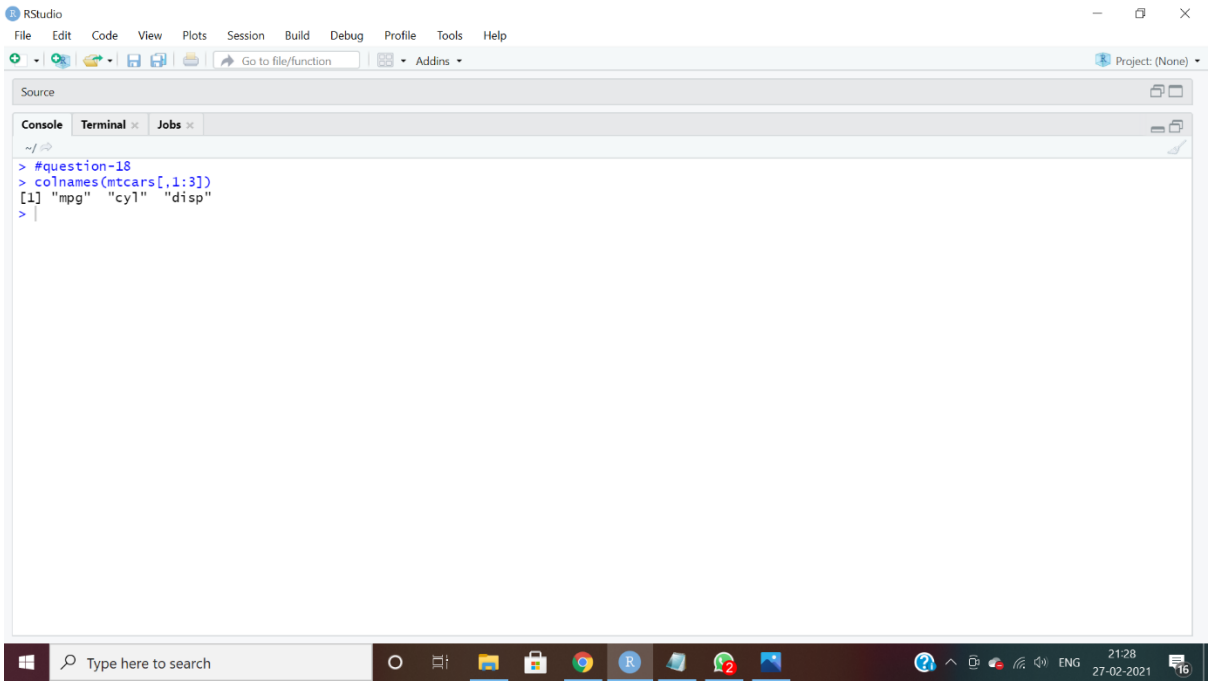


Q18) Print first three columns

Answer:

colnames(mtcars[,1:3])

OUTPUT

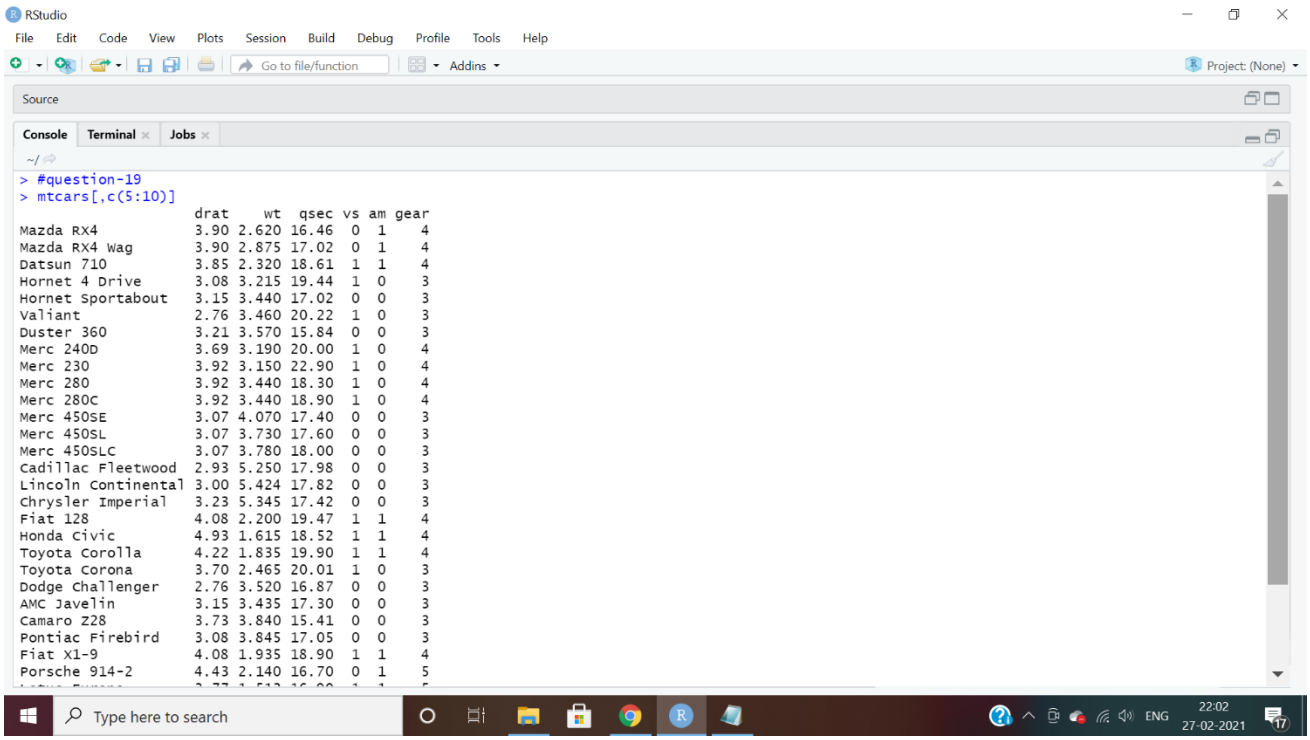


Q19) Print the elements of columns from 5 to 10

Answer:

mtcars[,c(5:10)]

OUTPUT

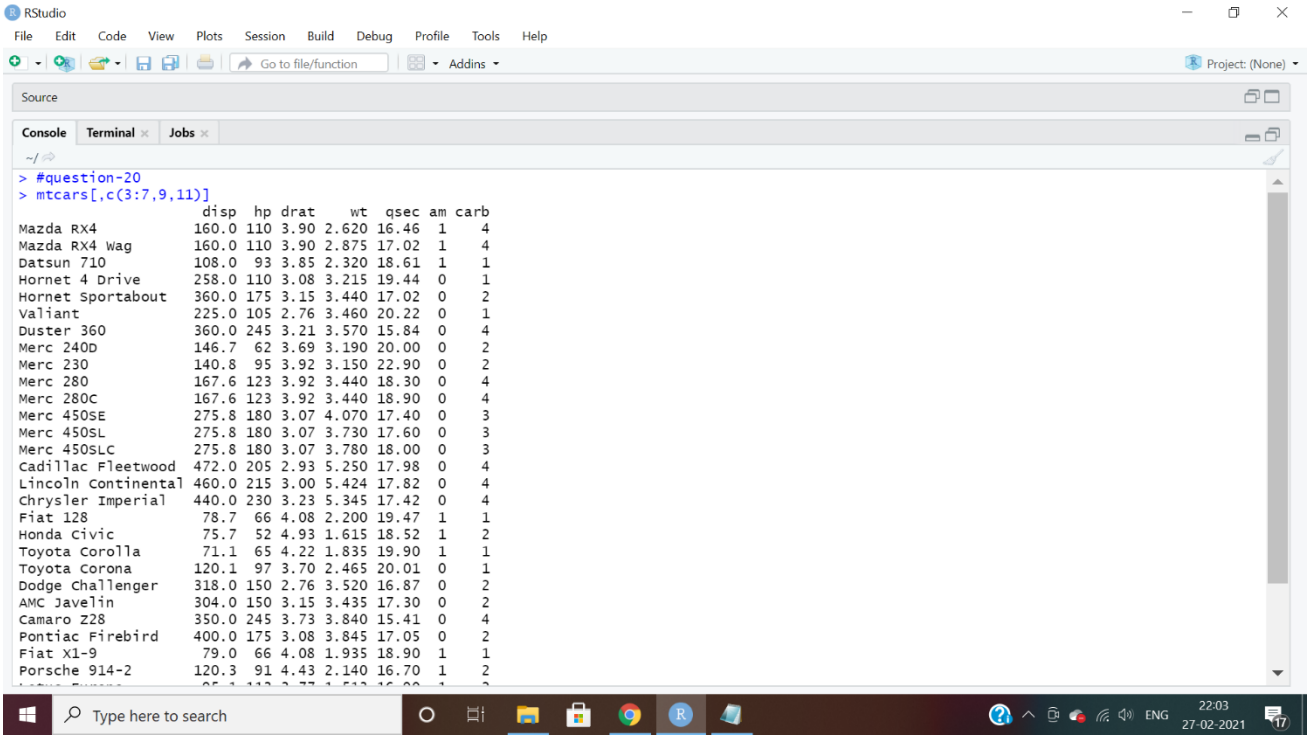


Q20) Print the elements of columns from 3 to 7, 9 and 11

Answer:

```
mtcars[,c(3:7,9,11)]
```

OUTPUT

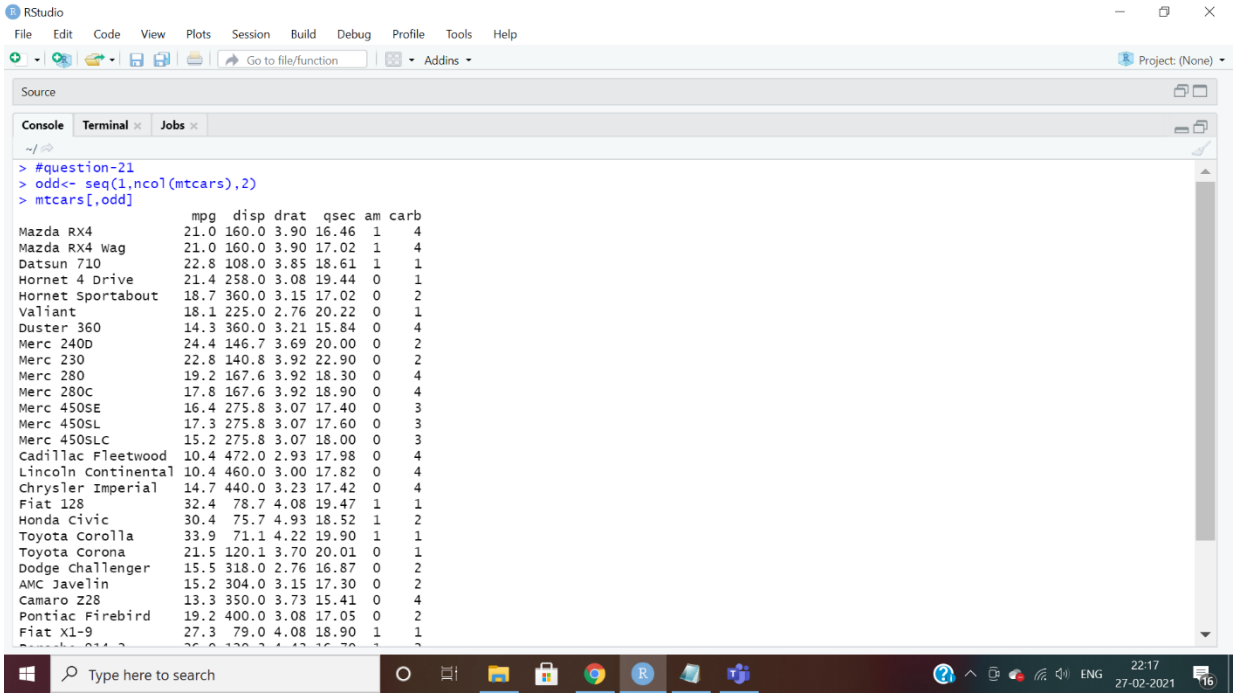


Q21) Print all odd indexed columns (1,3,5,...)

Answer:

```
odd<- seq(1,ncol(mtcars),2)
mtcars[,odd]
```

OUTPUT



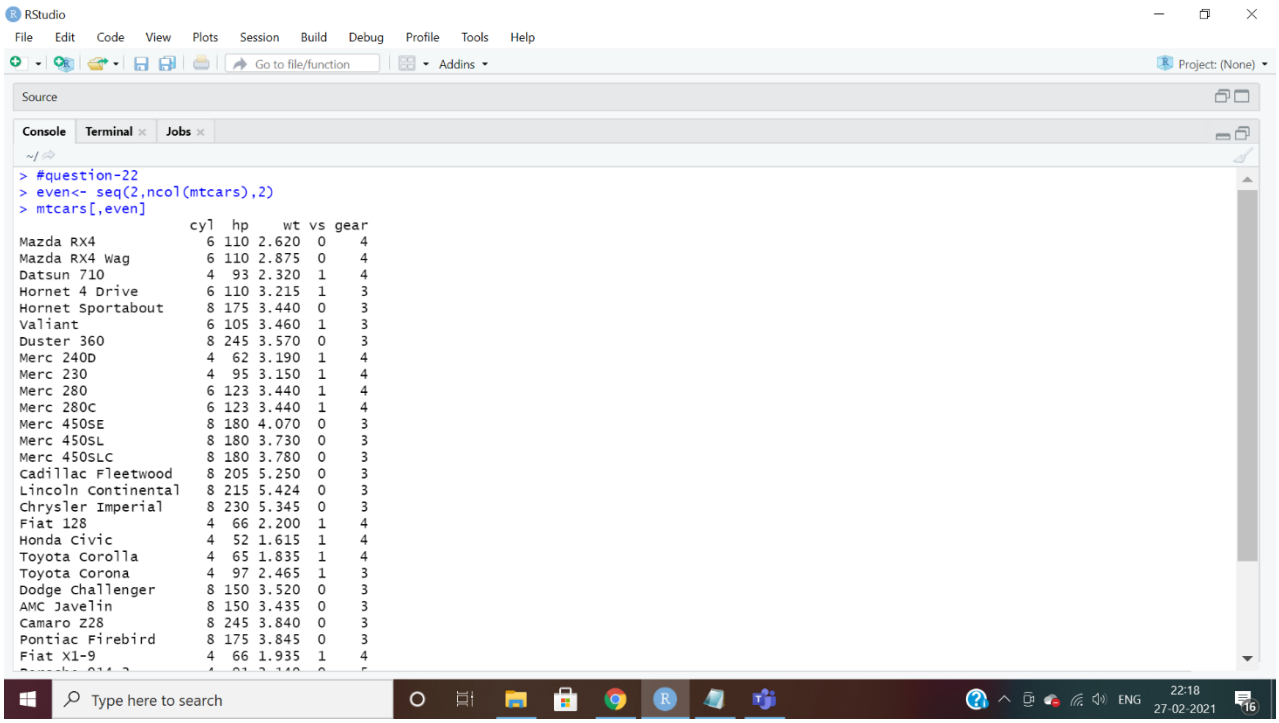
Q22) Print all even indexed columns (2,4,6,...)

Answer:

```
even<- seq(2,ncol(mtcars),2)

mtcars[,even]
```

OUTPUT

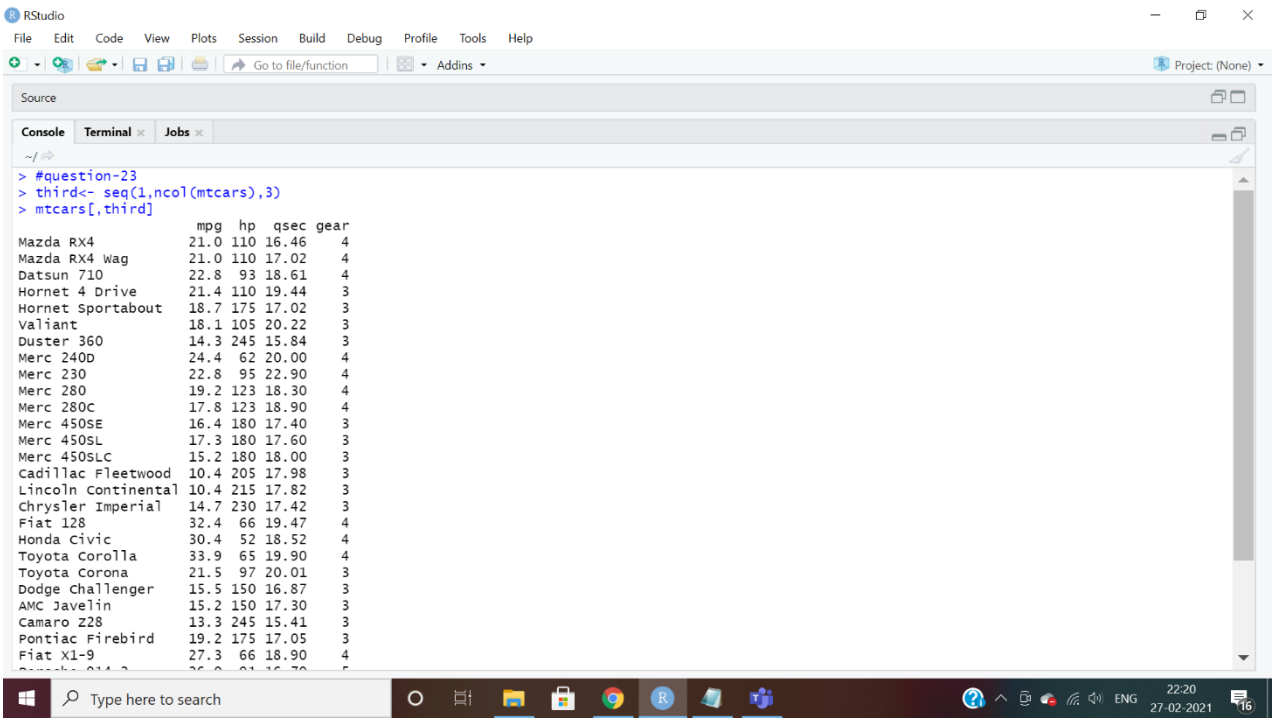


Q23) Print every 3rd column from 1st column (1,4,7,10..)

Answer:

```
third<- seq(1,ncol(mtcars),3)
mtcars[,third]
```

OUTPUT

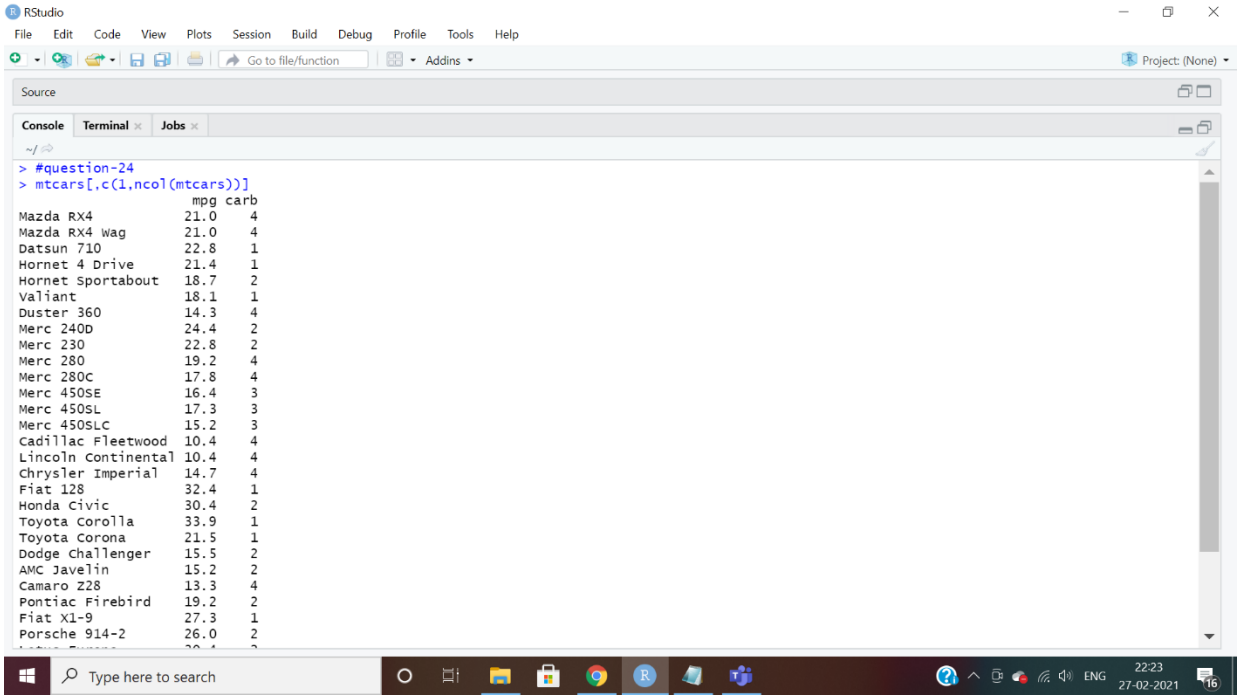


Q24) Print first column and last column

Answer:

```
mtcars[,c(1,ncol(mtcars))]
```

OUTPUT



Q25) Print last 3 columns

Answer:

mtcars[,(c((ncol(mtcars)-2):ncol(mtcars)))]

OUTPUT