

EXPERIMENT-MULTIPLE REGRESSION

CODE:

```
x<-c(151,174,138,186,128,136,179,163,152,131)
```

```
y<-c(63,81,56,91,47,57,76,72,62,48)
```

```
relation<-lm(y ~ x)
```

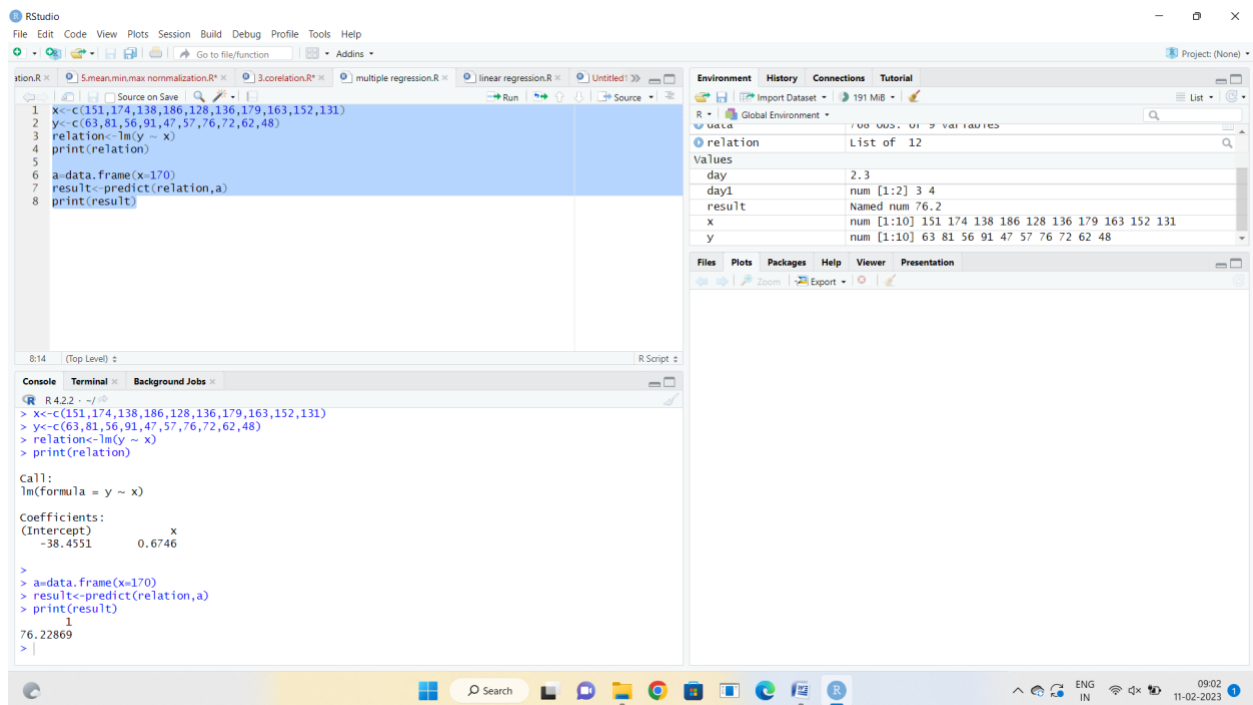
```
print(relation)
```

```
a=data.frame(x=170)
```

```
result<-predict(relation,a)
```

```
print(result)
```

OUTPUT:



The screenshot shows the RStudio interface with the following components:

- Script Editor:** Contains the R code for multiple regression.
- Environment:** Shows the objects created in the global environment: 'relation' (List of 12) and 'result' (Named num 76.2).
- Console:** Displays the output of the R commands, including the lm model coefficients and the predicted value for x=170.

Script Editor Code:

```
1 x<-c(151,174,138,186,128,136,179,163,152,131)
2 y<-c(63,81,56,91,47,57,76,72,62,48)
3 relation<-lm(y ~ x)
4 print(relation)
5
6 a=data.frame(x=170)
7 result<-predict(relation,a)
8 print(result)
```

Environment:

Object	Class	Attributes
relation	lm	Call: lm(formula = y ~ x)
result	num	76.2

Console Output:

```
R 4.2.2 ~ /
> x<-c(151,174,138,186,128,136,179,163,152,131)
> y<-c(63,81,56,91,47,57,76,72,62,48)
> relation<-lm(y ~ x)
> print(relation)

Call:
lm(formula = y ~ x)

Coefficients:
(Intercept)          x
   -38.45511    0.6746

>
> a=data.frame(x=170)
> result<-predict(relation,a)
> print(result)

      1
76.22869
>
```