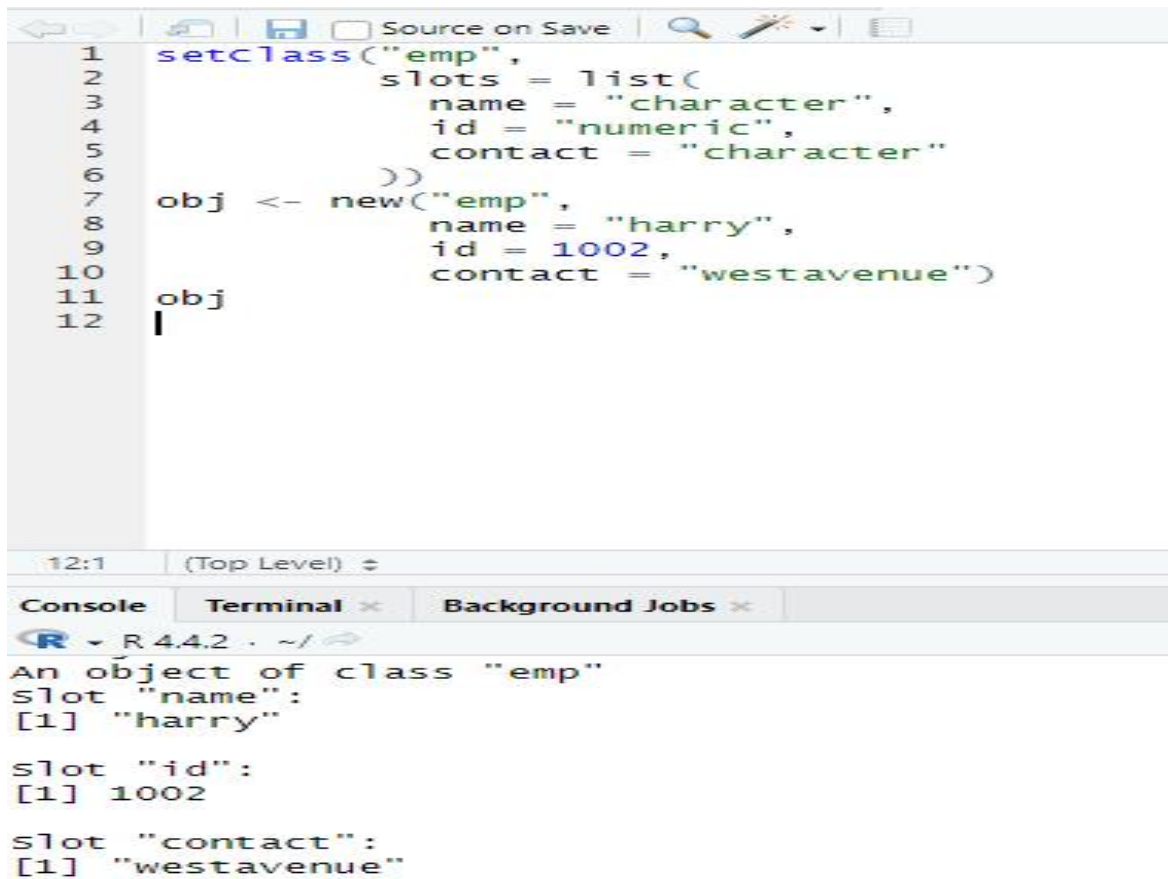


Statistics with R-programming

-thanuja R

(192325004)

S4 class – student information



```
1 setClass("emp",
2         slots = list(
3             name = "character",
4             id = "numeric",
5             contact = "character"
6         ))
7 obj <- new("emp",
8           name = "harry",
9           id = 1002,
10          contact = "westavenue")
11 obj
12 |
```

12:1 (Top Level) ↕

Console Terminal × Background Jobs ×

R 4.4.2 ~/

An object of class "emp"
slot "name":
[1] "harry"

slot "id":
[1] 1002

slot "contact":
[1] "westavenue"

EXPERIMENT 19:

DATA FRAME FOR EMPLOYEE NAME, SALARY AND DESIGNATION.

```
1 info<-data.frame(  
2   EMPLOYEEID =c(101,102),  
3   NAME = c("Harikrishnan R","Mohan S"),  
4   AGE = c(45,35),  
5   SALARY = c(250000,100000),  
6   DESIGNATION = c("Head Engineer","Technician")  
7 )  
8 print(info)  
9 |
```

9:1 (Top Level) ⚙

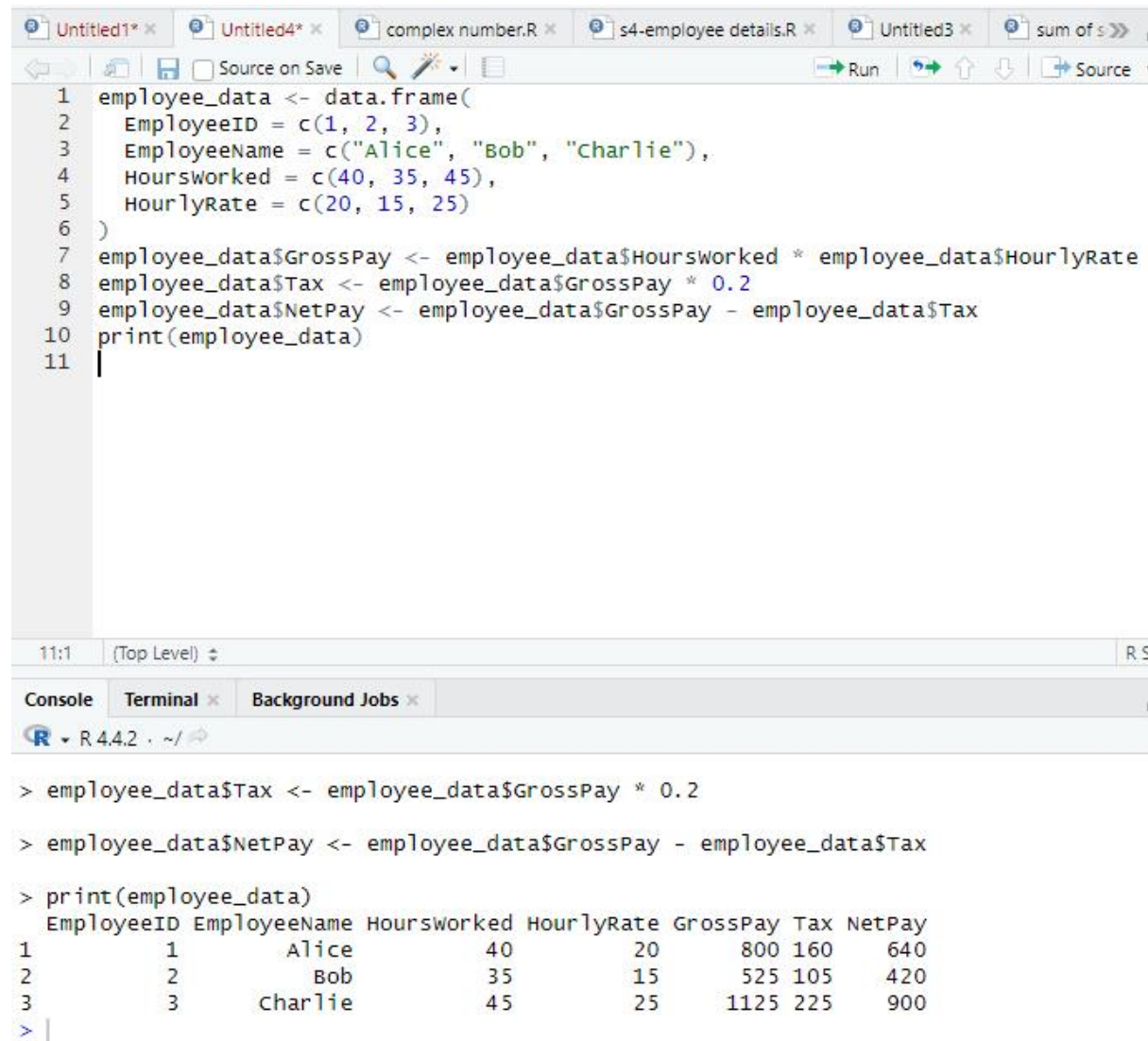
Console Terminal × Background Jobs ×

R 4.4.2 . ~/

```
+ NAME = c("Harikrishnan R","Mohan S"),  
+ AGE = c(45,35),  
+ SALARY = c(250000,100000),  
+ DESIG .... [TRUNCATED]  
  
> print(info)  
  EMPLOYEEID      NAME AGE SALARY DESIGNATION  
1         101 Harikrishnan R  45 250000 Head Engineer  
2         102      Mohan S  35 100000   Technician  
> |
```

EXPERIMENT 20:

DATAFRAME FOR PAYROLE SYSTEM.



```
1 employee_data <- data.frame(  
2   EmployeeID = c(1, 2, 3),  
3   EmployeeName = c("Alice", "Bob", "Charlie"),  
4   Hoursworked = c(40, 35, 45),  
5   HourlyRate = c(20, 15, 25)  
6 )  
7 employee_data$GrossPay <- employee_data$Hoursworked * employee_data$HourlyRate  
8 employee_data$Tax <- employee_data$GrossPay * 0.2  
9 employee_data$NetPay <- employee_data$GrossPay - employee_data$Tax  
10 print(employee_data)  
11
```

11:1 (Top Level) R S

Console Terminal Background Jobs

R 4.4.2 ~/

```
> employee_data$Tax <- employee_data$GrossPay * 0.2  
  
> employee_data$NetPay <- employee_data$GrossPay - employee_data$Tax  
  
> print(employee_data)  
EmployeeID EmployeeName Hoursworked HourlyRate GrossPay Tax NetPay  
1          1         Alice          40          20      800 160  640  
2          2          Bob          35          15      525 105  420  
3          3        Charlie          45          25     1125 225  900  
>
```