"A data frame is a table or a two-dimensional array-like structure in which each column contains values of one variable and each row contains one set of values from each column. Following are the characteristics of a data frame. ??? The column names should be non-empty. ??? The row names should be unique. ??? The data stored in a data frame can be of numeric, factor or character type. ??? Each column should contain same number of data items."

Create the data frame.

emp.data <- data.frame(emp_id = c (1:5), emp_name = c("Ram","Alex","Raj","Ryan","siva"), salary = c(623.3,515.2,611.0,729.0,843.25), start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", NA,"2015-03-27")), stringsAsFactors = FALSE)

Print the data frame.

print(emp.data)

Get the structure of the data frame.

str(emp.data)

Extract Specific columns.

result <- data.frame(emp.data$emp_name,emp.data$salary) print(result)

Extract first two rows.

result <- emp.data[1:2,] print(result)

Extract 3rd and 5th row with 2nd and 4th column.

result <- emp.data[c(3,5),c(2,4)] print(result)

Add the "dept" coulmn.

emp.data$dept <- c("IT","Operations","IT","HR","Finance") v <- emp.data print(v)

Bind the two data frames.

emp.finaldata <- rbind(emp.data,emp.newdata) print(emp.finaldata)

check dataframe

print(is.data.frame(emp.data)) print(ncol(emp.data)) print(nrow(emp.data))

null

sum(is.na(emp.data$start_date)) sum(is.na(emp.data))

sort

print(emp.data[order(emp.data$salary),])

Get the max salary from data frame.

sal <- max(emp.data$salary) print(sal)

Get the person detail having max salary.

retval <- subset(emp.data, salary == max(salary)) print(retval)

retval <- subset(emp.data, dept == "IT") print(retval)

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info <- subset(emp.data, salary > 600 & dept == "IT") print(info)

retval <- subset(emp.data, as.Date(start_date) > as.Date("2014-01-01")) print(retval)

write.csv(retval,"E:/COURSE/Data-Visualization/R-Lan/Prog/output.csv") newdata <- read.csv("E:/COURSE/Data-Visualization/R-Lan/Prog/output.csv", nrows=2)
print(newdata)
```