

## multiply a matrix with its transpose.

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```
M = matrix( c(2,6,5,1,10,4), nrow = 2,ncol = 3,byrow = TRUE) print(t(M)) t = M %*% t(M) print(t)
```

## looping repeat statement

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```
v <- c("Hello","loop") cnt <- 2
repeat { print(cnt) print(v) cnt <- cnt+1
if(cnt > 5) { break } }
```

## while loop

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```
v <- c("Hello","while loop") cnt <- 2
while (cnt < 7) { print(v) cnt = cnt + 1 }
```

## for loop

---

```
v <- LETTERS[1:4] for ( i in v) { print(i) }
```

## Create a function to print squares of numbers in sequence.

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```
new.function <- function(a) { for(i in 1:a) { b <- i^2 print(b) } }
```

## Call the function new.function supplying 6 as an argument.

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```
new.function(6)
```

## Get the max salary from data frame.

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```
sal <- max(data$salary) print(sal)
```

## Get the person detail having max salary.

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```
retval <- subset(data, salary == max(salary)) print(retval)
retval <- subset( data, dept == "IT") print(retval)
info <- subset(data, salary > 600 & dept == "IT") print(info)
retval <- subset(data, as.Date(start_date) > as.Date("2014-01-01")) print(retval)
write.csv(retval,"D:/R Workshop/output.csv") newdata <- read.csv("D:/R Workshop/output.csv", nrow=2) print(newdata)
df=data.frame(X=5,id=5,name='Rayon',salary=12000,start_date= '2014-11-15',dept='IT') df
write.table(df, "D:/R Workshop/output.csv", append = TRUE,sep = ",", col.names = FALSE, row.names = FALSE, quote = FALSE)
install.packages("xlsx") library("xlsx") mydata <- read.xlsx("D:/R Workshop/mydata.xls", sheetIndex=1) mydata
```