

Vector and Matrix (Lab-8 / Part-1)

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vector and Matrices

Vectors

task 1: Sequence of number from 8.5 to down 4.5

```
8.5:4.5
```

```
## [1] 8.5 7.5 6.5 5.5 4.5
```

task-2: Value concatenated into single vector

```
c(1, 1:3, c(5,8), 13)
```

```
## [1] 1 1 2 3 5 8 13
```

task-3: Printing the vector function.

```
vector("numeric",5)
```

```
## [1] 0 0 0 0 0
```

```
vector("complex",5)
```

```
## [1] 0+0i 0+0i 0+0i 0+0i 0+0i
```

```
vector("logical",5)
```

```
## [1] FALSE FALSE FALSE FALSE FALSE
```

```
vector("character",5)
```

```
## [1] "" "" "" "" ""
```

```
vector("list",5)
```

```
## [[1]]
## NULL
##
## [[2]]
## NULL
##
## [[3]]
## NULL
##
## [[4]]
## NULL
##
## [[5]]
## NULL
```

Indexing Vector

```
x <- (1:5) ^ 2
x
```

```
## [1] 1 4 9 16 25
```

```
x[c(1,3,5)]
```

```
## [1] 1 9 25
```

```
x[c(-2,-4)]
```

```
## [1] 1 9 25
```

```
(three_d_array <- array
  (1:24,
   dim=c(4,3,2),
   dimnames=list(
     c("one","two","three","four"),
     c("first","second","third"),
     c("un","deux")
   )))
```

```
## , , un
##
##      first second third
## one      1      5      9
## two      2      6     10
## three    3      7     11
## four     4      8     12
##
## , , deux
##
##      first second third
```

```
## one      13      17      21
## two      14      18      22
## three    15      19      23
## four     16      20      24
```

```
class(three_d_array)
```

```
## [1] "array"
```