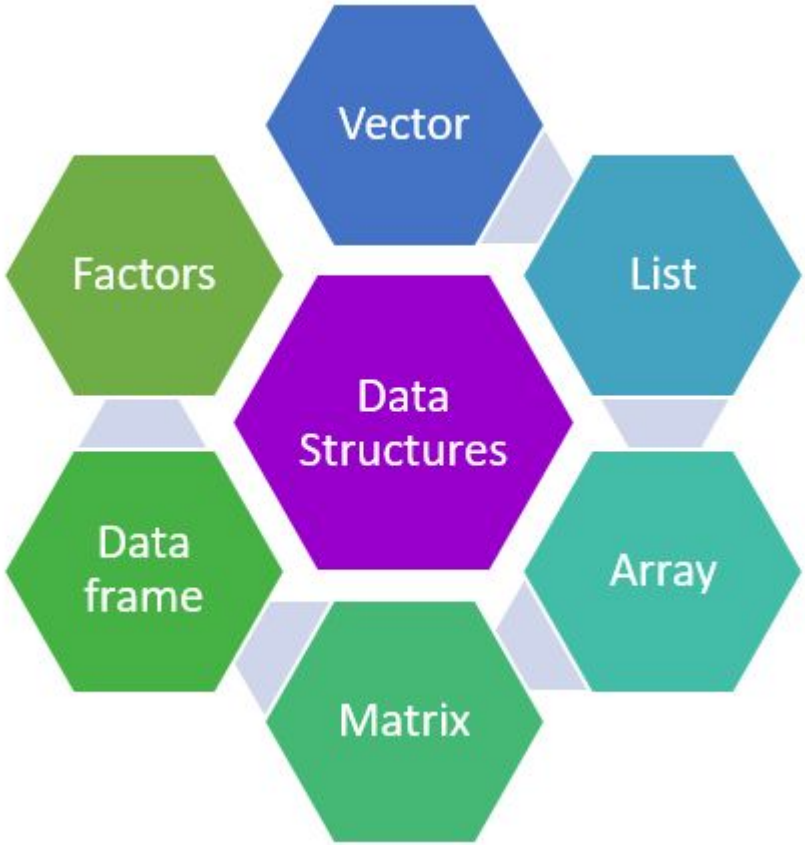
Module 1

Data Structures in R


Vector
Factors
List
Data Structures
Data frame
Array
Matrix

Vectors

- Vectors are single-dimensional, homogeneous data structures.
- We can store different types of data but R converts the values to maintain the vector's homogeneous nature. This is called **Coercion**

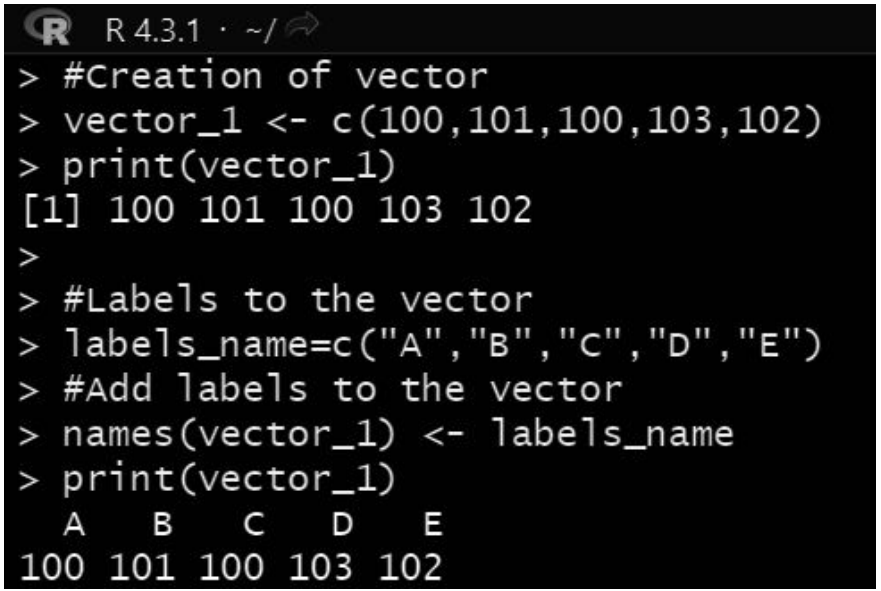
Creation of vector

```
#creating a vector using c()
vector_1 <- c(100,101,100,103,102)
print(vector_1)

#creating a vector using seq()
vector_2 <- seq(1,10,by=2)
print(vector_2)

#creating a vector using : operator
vector_3 <- 1:7
print(vector_3)
```

```
R 4.3.1 · ~/
> #creating a vector using c()
> vector_1 <- c(100,101,100,103,102)
> print(vector_1)
[1] 100 101 100 103 102
>
> #creating a vector using seq()
> vector_2 <- seq(1,10,by=2)
> print(vector_2)
[1] 1 3 5 7 9
>
> #creating a vector using : operator
> vector_3 <- 1:7
> print(vector_3)
[1] 1 2 3 4 5 6 7
```

Naming of vector - Option 1

```r
#Creation of vector
vector_1 <- c(100,101,100,103,102)
print(vector_1)

#Labels to the vector
labels_name=c("A","B","C","D","E")
#Add labels to the vector
names(vector_1) <- labels_name
print(vector_1)
```



Naming of vector - Option 2

Naming of vector - Option 3

Naming of vector

Naming of vector