

A Program is a collection of some well defined instruction to perform some task.

I1
I2
I3
...
In

R is a Programming language and Software environment for **statistical analysis**, **graphics representation** and reporting.

Features of R Programming

- i) Well developed, simple and effective programming language
- ii) Effective data handling and storage facility
- iii) Provides a suite of operators for calculation on array, **list, vector**
- iv) Provides a large, coherent and integrated collection of tools for data analysis.

Why use R for Statistical analysis:

- I) Open source and free software
- II) R runs on all platform(Windows, Linux, Mac)
- III) Learning R will increase your chance to get a JOB.

Application Of R programming In Real world

- i) **Data Science**
- ii) **Statistical Computing**
- iii) **Machine Learning**

Data

```
a=5  
b=6  
c = a+b  
print(c)
```

Quit()

```
a=5  
b=6  
c= 8  
sum= a+b+c  
print (sum)  
ls()
```

Vector = A vector is the most common and basic data structure in R and is pretty much the workhorse of R.

Let **x** be a vector variable

Int = 1, 2, 3, -3

Str/ character = "abc", "xyz"

Float = 1.2, 1.00, (double)

X <- c(1, 2, 3)

1.000, 2.000, 3.0000

< / or =

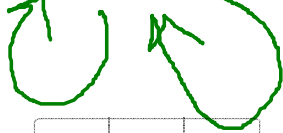
List =

Value always assign RTL (Right To Left) Format



Logical value

X = 5 x <- 5



i) Don't use " " before & after

ii) Don't use T, F

a=5

b=6

c= 8

sum= a+b+c

print (sum)

ls()

rm(list=c("sum"))

ls()

#This is my First R Proaaming

print("hello pavnaj and Prince")