Assignment No	6
Title	R Studio
Objective	Basics of R
Roll No	MCA2511

```
> #assign value
> a<-100
>
> #to print x
> a
[1] 100
> #type of x
> class(a)
[1] "numeric"
> #length of x
> length(a)
[1] 1
>
> #range
> y=(91:100)
> y
 [1]  91  92  93  94  95  96  97  98  99 100
> class(y)
[1] "integer"
> length(y)
[1] 10
>
> #range with skip
> b = seq(from=10, to = 15, by=2)
> b
[1] 10 12 14
> class(y)
[1] "integer"
> length(y)
[1] 10
```

```
>
>
> #create vector
> my_num = c(2,4,9,0)
> my_num
[1] 2 4 9 0
> class(my_num)
[1] "numeric"
> length(my_num)
[1] 4
>
> t = "Mukund"
> t
[1] "Mukund"
> class(t)
[1] "character"
> length(t)
[1] 1
>
> friend = c("sanjay", "rohan", "aniket")
> friend
[1] "sanjay" "rohan"  "aniket"
>
> # return objects we created
> objects()
[1] "a"      "b"      "friend" "my_num" "t"      "y"
>
> ls
function (name, pos = -1L, envir = as.environment(pos), all.names = FALSE,
    pattern, sorted = TRUE)
{
    if (!missing(name)) {
        pos <- tryCatch(name, error = function(e) e)
        if (inherits(pos, "error")) {
            name <- substitute(name)
            if (!is.character(name))
                name <- deparse(name)
            warning(gettextf("%s converted to character string",
                sQuote(name)), domain = NA)
            pos <- name
        }
    }
    all.names <- .Internal(ls(envir, all.names, sorted))
```

```
  if (!missing(pattern)) {
    if ((ll <- length(grep("[", pattern, fixed = TRUE))) &&
      ll != length(grep("]", pattern, fixed = TRUE))) {
      if (pattern == "[") {
        pattern <- "\\["
        warning("replaced regular expression pattern '[' by  '\\\\['")
      }
      else if (length(grep("[^\\\\]\\[<-", pattern))) {
        pattern <- sub("\\[<-", "\\\\\\[<-",
          pattern)
        warning("replaced '[<-' by '\\\\[<-' in regular expression pattern")
      }
    }
    grep(pattern, all.names, value = TRUE)
  }
  else all.names
}
<bytecode: 0x0000021a606ae728>
<environment: namespace:base>
>


> myString <- "Hello World"
> print(myString)
[1] "Hello World"
> myString
[1] "Hello World"
>
> #setwd() - sets current working directory
> setwd("A:/MCA2511/ADBMS_Lab")
> #getwd() - gets current working directory
> getwd()
[1] "A:/MCA2511/ADBMS_Lab"
>
>
> #is function
> x=3
> class(x)
[1] "numeric"
> is.character(x)
[1] FALSE
> is.integer(x)
[1] FALSE
```

```
> is.numeric(x)
[1] TRUE
> is.double(x)
[1] TRUE
> typeof(x)
[1] "double"
>
>
> y<-'2.14'
> y
[1] "2.14"
> as.integer(y)
[1] 2
> as.double(y)
[1] 2.14
> as.character(y)
[1] "2.14"
>
>
> x<- c(56,51,544,412)
> cat('\n','Vector using c Function', '\n',x)

 Vector using c Function
 56 51 544 412> length(x)
[1] 4
> typeof(x)
[1] "double"
> class(x)
[1] "numeric"
>
> y<-seq(1,10,length.out = 6)
> cat('\n', 'Vector using seq function','\n',y)

 Vector using seq function
 1 2.8 4.6 6.4 8.2 10> length(y)
[1] 6
> typeof(y)
[1] "double"
>
> z<-2:8
> cat('\n','Vector using range','\n',z)

 Vector using range
```

```
 2 3 4 5 6 7 8>
> y<-c('shubham','ganesh','kartik')
> length(y)
[1] 3
>


a<-5
b<-7

a>b
a<b
a<=b
a==5
b!=7
b==8

x<-c(45,612,7)
y<-c(4,12,78)

x<y
x>y
x+y
x-y

x[0]
x[1]
x[3]
z<-y[2]
z

x[1:3]
x[1:5]
x[1:5]

#- to eliminate that values
y[-3]
#select particular value in vector
x[c(1,2,3)]


#MY
```

```
x1 = c(31,32,23,14,55,46,27,18,19,10,11,12,13)
x2 = c(21,22,23,24,25,26,27,28,29,10,11,12,13)

x=x1
y=x2
x<y
x>y
x+y
x-y

x[0]
x[1]
x[3]
z<-y[2]
z

x[1:3]
x[1:5]
x[1:5]
#- to eliminate that values
y[-3]
#select particular value in vector
x[c(1,2,3)]
```

values	
a	5
b	7
friend	chr [1:3] "sanjay" "rohan" "aniket"
m	"abc"
my_num	num [1:4] 2 4 9 0
myString	"Hello World"
t	"Mukund"
x	num [1:13] 31 32 23 14 55 46 27 18 19 10 ...
x1	num [1:13] 31 32 23 14 55 46 27 18 19 10 ...
x2	num [1:13] 21 22 23 24 25 26 27 28 29 10 ...
y	num [1:13] 21 22 23 24 25 26 27 28 29 10 ...
z	22