

Basic R commands

1. creating list

```
list6[2:4]
```

concatenate 2 list

```
list8<-c(list6,list7)
```

```
list8
```

```
->mont("mar","apr","jan","feb")
```

```
->mont
```

```
->sort(mont)
```

```
->months[3]
```

```
->sort(mont,decreasing=TRUE)
```

```
list_rep<-rep(c(1,2,3),3)
```

```
list_rep<-rep(c(1,2,3),times=3)
```

```
list_rep<-rep(c(1,2,3),each=3)
```

```
list_rep<-rep(c(1,2,3),times=c(3,4,1))
```

```
num_rand<-seq(from=0, to=50)
```

```
num_rand
```

```
num_rand<-seq(from=0, to=50, by=5)
```

```
num_ar<-c(1:20)
```

```
num_ar
```

Array: dim(3,2,3)-->(3rows,2cols,3arrays)

```
m_arr<-array(num_ar,dim=c(3,2,3))
```

```
m_arr[3,2,2] -->12
```

```
-->14
```

```
-->4
```

DataFrame:

```
empid<-c(11,12,13,14,15)
```

```
empname<-c("aa","bb","cc","dd","ee")
```

```
datf<-data.frame(empid,empname)
```

```
datf
```

```
datf$empid
```

```
datf$empname
```

```

nrow(datf)
ncol(datf)

names(datf)
//alter col name
names(datf)[1]<-"std_id"
names(datf)[2]<-"std_name"
datf
//adding row --> rbind()
stdf<-rbind(datf,c(16,"ff"))
stdf
datf

//adding col --> cbind
std_n<-cbind(stdf, marks=c())

// if else
a<-30
b<-50
if(b>a){
print("b is greater")
} else if(a>b){
print("a is greater")
}

a<-2
while(a<8){
print(a)
a<-a+1
}

months<-list("jan","feb","mar","apr")
for(x in months)
{
if(x=="mar")
{
next
}
print(x)
}
//matrix
matrx1<-matrix(c(1,2,3,4,5,6,7,8,9),nrow=3,ncol=3)
matrx1

```

```
matrx2<-matrix(c(11,12,13,14,15,16,17,18,19),nrow=3,ncol=3)
matrx2
```

```
matrx1+matrx2
matrx1*matrx2
matrx1-matrx2
matrx1/matrx2
```

```
t(matrx1)
```

```
//converting data/matrix into table
dat<-matrix(c(1:16),nrow=4,ncol=4)
dat
```

```
tdata<-as.table(dat)
tdata
colnames(dat)<-c('c1','c2','c3','c4')
rownames(dat)<-c('r1','r2','r3','r4')
```

```
tdata<-as.table(dat)
```

```
tdata
```

```
//plotting
```

```
plot(1:8)
```

```
plot(2:10, col="red")
```

```
x<-c(2,3,5,6)
```

```
y<-c(1,6,4,8)
```

```
plot(x,y)
```

```
plot(1:8, type="l")
```

```
plot(2:10, col="red" type="l" main="my graph", xlab="xaxis", ylab="yaxis" lwd=2, lty=4)
```

you can give lty= 1 to 6

4--> dot dashed line

3--> dotted line

2--> dashed line

5--> long dashed line

6--> two dashed line

```
piechart
```

```
x<-c(30,30,40)
```

```
pie(x)
```

```
lbl<-c("maths","sci","ss")  
colors<-c("blue","yellow","gree")  
pie(x,label=lbl, main="subjects", col=colors)
```

```
x<-c(2,3,5,6)  
y<-c(1,6,4,8)  
barplot(y,names.arg=x)
```

