In [1]:

```
#repeat loop
res=1
i=1
repeat
    {
    print(res)
    i=i+1#increment
    res=res+1

if(i>5)#condition
    {
    break
}
}
```

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

In [2]:

```
#swicth case
case=as.integer(readline("which case:"))
switch(case,"add","sub","mult")
```

```
which case:1
```

'add'

In [3]:

```
#swich case without getting from user
switch(2,"add","sub","mul")
```

'sub'

In [4]:

```
switch("color",name="siva",age=19,dept="cse",color="black")
```

'black'

In [5]:

```
#function
a=function(name)
    {
    print(name)
}
a("siva")
```

```
[1] "siva"
```

In [28]:

```
#required arugument
a=function(name,dept)
    {
    print(paste("name",name))
     print(paste("dept",dept))
}
a("siva")#hav to pass two arguments
```

```
[1] "name siva"
[1] "dept it"
```

In [27]:

```

#default argument
b=function(name,dept="cse")
    {
    print(paste("name",name))
     print(paste("dept",dept))
}
b("siva")
```

```
[1] "name siva"
[1] "dept cse"
```

In [16]:

```
#keyword argument
c=function(name,dept)
    {
    print(paste("name:",name))
     print(paste("dept:",dept))
}
c(name="siva",dept="cse" )
```

```
[1] "name: siva"
[1] "dept: cse"
```

In [20]:

```
#default argument
d=function(name,dept="cse",age=19)
    {
    print(paste("name:",name))
     print(paste("dept:",dept))
     print(paste("age:",age))
}
d("siva","it",18)
d("hiba")#default data fills the once which didnt hav an argument
```

```
[1] "name: siva"
[1] "dept: it"
[1] "age: 18"
[1] "name: hiba"
[1] "dept: cse"
[1] "age: 19"
```

In [21]:

```
#simple calculator
add=function(x,y)
    {
    return(x+y)
}
sub=function(x,y)
    {
    return(x-y)
}
mul=function(x,y)
    {
    return(x*y)
}
div=function(x,y)
    {
    return(x/y)
}
#take input from the user
print("select operator")
print("1.add")
print("2.sub")
print("3.mul")
print("4.div")
choice=as.integer(readline("enter choice[1/2/3/4]"))
num1=as.integer(readline("enter first num:"))
num2=as.integer(readline("enter second num:"))
operator<-switch(choice,"+","-","*","/")
result<-switch(choice,add(num1,num2),sub(num1,num2),mul(num1,num2),div(num1,num2))
print(paste(num1,operator,num2,"=",result))
```

```
[1] "select operator"
[1] "1.add"
[1] "2.sub"
[1] "3.mul"
[1] "4.div"
enter choice[1/2/3/4]1
enter first num:4
enter second num:5
[1] "4 + 5 = 9"
```

In [22]:

```
#normal distribution
rnorm(5)
```

```
0.0317109229380848  0.155013727560675  0.271944381919186
-0.504050153927916  -0.342165488198402
```

In [23]:

```
rnorm(2,mean=5,sd=2)#adding mean values
```

```
3.59921762953416  5.9464950009392
```

In [24]:

```
#uniform distribution
runif(10)
```

0.920341702178121 0.292268018936738 0.905695218360052 0.545574202667922
0.383102828636765 0.17842177208513 0.686504794983193 0.476352296769619
0.17038890812546 0.486492931609973

In [25]:

```
set.seed(101)#to log the generated number
runif(3,min=10,max=100)
```

79.6093482407741 54.8620978067629 13.4768297802657

In [ ]: