

#1

```
b=c(27,32,21,33)
```

```
a=c("Beijing","Chengdu","Haerbin","Guangzhou")
```

```
weather=data.frame(a,b)
```

```
for (i in 1:length(b))
```

```
{
```

```
  if (b[i]>30)
```

```
  {
```

```
    print(a[i])
```

```
  }
```

```
}
```

```
  if(b[1]>25)
```

```
{
```

```
  is_hot=TRUE
```

```
}
```

```
  if(b[1]<=25)
```

```
{
```

```
    is_hot=FALSE
```

```
}
```

```
is_hot
```

```
is_hot
```

```
tem=c(27,32,21,33)
```

```
ave(tem)
```

#2

```
names=c("qym","sx","chh","cbl","cy","jxj","czz")
```

```

places=c("普吉岛","马尔代夫","苏州","扬州","九寨沟","西藏","香格里拉")

partners=c(5,6,7,8,9,2,3)

days=c(9,8,7,8,6,5,8)

basic_message=data.frame(names,places,partners,days)

abroad=c(2,2,1,1,1,1,1)

basic_message_new=cbind(basic_message,abroad)

a1=basic_message_new[basic_message_new$abroad==1&basic_message_new$partners>5
&basic_message_new$days>=8,]

#3

x=c(170,180,160)

names(x)=c("a","b","c")

x

m1=matrix(1,2,2)

m2=matrix(2,2,2)

rbind(m1,m2)

cbind(m1,m2)

rbind(m1,m2)%*%cbind(m1,m2)

cbind(m1,m2)%*%rbind(m1,m2)

#4

data=c(1,2,3,4)

m3=matrix(data,2,2,byrow = TRUE)

data2=c(5,6,7,8)

m4=matrix(data2,2,2,byrow = TRUE)

data3=data+data2

plus=matrix(data3,2,2,byrow=TRUE)

Name=c("xiaoming","xiaohong","xiaomei","xiaoli","xiaojun")

Chinese=c(93,83,87,89,78)

Maths=c(98,99,90,92,96)

English=c(95,89,94,88,90)

Summary=Chinese+Maths+English

```

```

scores=data.frame(Name,Chinese,Maths,English,Summary)

Name=c(Name,"xiaoying")

Chinese=c(Chinese,85)

Maths=c(Maths,95)

English=c(English,95)

Summary=Chinese+Maths+English

score=data.frame(Name,Chinese,Maths,English,Summary)

#5

scores=seq(60,99,13)

years=seq(2009,2012,1)

xiaogao_data0=data.frame(scores,years)

scores=c(60,73,86,99,95,90,91)

years=seq(2009,2015,1)

xaigao_data1=data.frame(scores,years)

#?

for (i in 2:7)

{

  if(scores[i]<scores[i-1])

  {

    print(years[i])

  }

}

#6

#scan?

names=c("chade","lasike","dehuaier","sunyang","ye","bide","hasi","james")

countries=c("sa","ru","usa","ch","ja","ge","usa","en")

DF1=data.frame(names,countries)

time=c("1:45:20","1:45:91","1:45:23","1:44:65","1:45:90","1:45:84","1:45:58","1:45:49")

DF2=cbind(DF1,time)

```

```
rtime=c(0.63,0.66,0.65,0.76,0.65,0.84,0.76,0.66)
```

```
DF3=cbind(DF2,rtime)
```

```
time1=c(120,191,123,65,190,184,158,149)
```

```
ttime=time1-rtime
```

```
for (i in 1:8)
```

```
{
```

```
  if(ttime[i]==min(ttime))
```

```
  {
```

```
    print(names[i])
```

```
  }
```

```
}
```

#由数据框知，成绩最好的孙杨反应时长第二长，而成绩最差的拉斯科反应时长第五长，  
反应最慢的比德尔曼成绩排第六

#，反应最快的查得成绩排第二，由此可得出，反应时的长短对运动员的成绩并不会产生较大影响

	names	countries	time	rtime
4	sunyang	ch	1:44:65	0.76
1	chade	sa	1:45:20	0.63
3	dehuaier	usa	1:45:23	0.65
8	james	en	1:45:49	0.66
7	hasi	usa	1:45:58	0.76
6	bide	ge	1:45:84	0.84
5	ye	ja	1:45:90	0.65
2	lasike	ru	1:45:91	0.66

```
#7
```

```
y<-1:4
```

```
data1<-data.frame(x1=c(1,3,5,7), x2=c(2,4,6,8),x3=c(11,12,13,14),x4=c(15,16,17,18))
```

```
data2<-cbind(data1[,1:2],y,data1[,3:ncol(data1)])
```

```
names=c("xiaohong","xiaoming","xiaolv")
tags=c(Tag1,Tag2,Tag3,Tag4,Tag5)
Tag1=c("z","l","t")
Tag2=c("t","l","z")
Tag3=c("l","t","t")
Tag4=c("z","z","m")
Tag5=c("p","m","l")
DF=data.frame(names,Tag1,Tag2,Tag3,Tag4,Tag5)
for(i in 1:3)
{
  if(Tag2[i]==Tag1[i])
  {
    print(Tag2[i])
  }
}
for(i in 1:3)
{
  if(Tag3[i]==Tag1[i])
  {
    print(Tag3[i])
  }
}
for(i in 1:3)
{
  if(Tag4[i]==Tag1[i])
  {
    print(Tag4[i])
  }
}
for(i in 1:3)
```

```
{  
    if(Tag5[i]==Tag1[i])  
    {  
        print(Tag5[i])  
    }  
}
```