

# Programming R

(STATS240.1: A short course in R)

Gunnar Stefánsson, Ásta Jenný Sigurðardóttir and Lorna Taylor

October 15, 2012

## The if statement

```
if(length(x)>5){  
  m<-mean(x)  
} else{  
  print('‘x isn't long enough’')  
}
```

# Loops - for

```
sum<-0
for(i in 1:100){
  sum<-sum+i*i
}
```

## Storing loop results

```
x<-NULL
x<-c(x,item1)
x<-c(x,item2)
x<-c(x,item3)
...
```

or

```
x<-NULL
for(i in 1:5){
  x<-c(x,i)
}
```

or (much better)

```
x<-rep(NA,5)
for(i in 1:5){
  x[i]<-i
```

## Loops - while

```
sum<-0
i<-0
while(sum<100){
  i<-i+1
  sum<-sum+i
}
```