

if else

```
if (condition) {
  ## do something
} else {
  ## do something else
}

if (x > 3) {
  y <- 10
} else {
  y <- 0
}
```

for loop

```
for (i in 1:10) {
  print(i)
}

## The following loops have the
same behavior
x <- c("a","b","c","d")
for (i in 1:4) {
  print(x[i])
}

for (i in seq_along(x)) {
  print(x[i])
}

for (letter in x) {
  print(letter)
}

## If a for loop has a single
expression
for (i in 1:4) print(x[i])
```

while loop

```
count <- 0
while (count < 10){
  print(count)
  count <- count + 1
}
```

repeat, next, break

```
x0 <- 1
tol <- 1e-8
repeat {
  x1 <- somefunction()
  if (condition) {
    break
  } else {
    (another
condition)
  }
}

for (i in 1:100) {
  if (i <= 20) {
    # Skip the
first 20 iterations
    next
  }
  ## Do something here
}
```

function

```
add2 <- function(x + y) {
  x + y
}

## A function always returns the
last expression
above <- function(x, n) {
  use <- x > n
  x[use]
}
```

