R vs Python Control Flow

1. Conditions

	R	Python

if-else	`if (age > 65){`
	`  print("Older than 65")`
	`} else if (age > 17){`
	`  print("Between 18 and 65")`
	`} else {`
	`  print("Younger than 18")`
	`}`
		`if age > 65:`
		`  print("Older than 65")`
		`elif age > 17:`
		`  print("Between 18 and 65")`
		`else:`
		`  print("Younger than 18")`

	Vectorized: `x = ifelse(age>18, 1, 2)`	

2. Loops

	R	Python

for	`for (x in ages){`
	`  print(x)`
	`}`
		`for x in ages:`
		`  print(x)`

	`for (i in seq_along(ages)){`
	`  print(ages[i])`
	`}`
		`for i in range(len(ages)):`
		`  print(ages[i])`

while	`while (x <= 100):` `  x = x + 1`	`while x <= 100:` `  x += 1`

break: ***leave loop***	`for (x in ages){`
	`  if (x == 10){`
	`  break`
	`  }`
	`  print(x)`
	`}`
		`for x in ages:`
		`  if x == 10:`
		`  break`
		`  print(x)`

next: ***go to next iteration of loop***	`for (x in ages){`
	`  if (x == 10){`
	`  next`
	`  }`
	`  print(x)`
	`}`
		`for x in ages:`
		`  if x == 10:`
		`  continue`
		`  print(x)`

3. Functions

	R	Python

Definition	`fun = function(arg1, arg2){`
	`  return(arg1 + arg2)`
	`}`
		`def fun(arg1, arg2):`
		`  return arg1 + arg2`

Default Argument	`fun = function(arg1, arg2=1){`
	`  return(arg1 + arg2)`
	`}`
		`def fun(arg1, arg2=1):`
		`  return arg1 + arg2`

4. Exceptions

	R	Python

stop	`if (x==10){`
	`  stop("x is 10")`
	`}`
		`if x == 10:`
		`  raise Exception("x is 10")`