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# --- COMPARISON OPERATOR ---

== # partial equality check for value but not type
!= # partial inequality check for value but not type
> # comparison operator
< # comparison operator
>= # comparison operator
<= # comparison operator

# --- LOGICAL OPERATOR ---

& # logical and
| # logical or
! # logical not
```

Control structures

```
# ---- CONTROL STRUCTURE ----

# --- CONDITIONALS ---

# IF ELSE IF ELSE

x <- 5
if (x > 0) {
  print("x is positive number")
} else if (x < 0) {
  print("x is non-positive number")
} else {
  print("this is just for edge-guarding but should logically never run")
}

# SWITCH()
# the switch() construct allows for a degree of pattern-matching in R, the equivalent of switch case and match case statements in other programming languages
# each comma-delimited predicate case condition listed within the switch() construct has its relationship specified with =
# first argument in switch() is the value to be checked
# final argument in switch() is the default fall-through value returned if all other specified predicate case conditions are unmet
# the result of switch() constructs can be directly assigned to a variable, reminiscent of other functional languages

x <- 3
result <- switch(x,
  "1" = "one",
  "2" = "two",
  "3" = "three",
  "4" = "four",
  "invalid number")

# --- LOOPS ---
```