Description

`if` evaluates the expression, and if it is true (evaluates to a nonzero number), `if` executes the statement or statement block that immediately follows it; otherwise, `if` skips the statement or block.

`if ... else` evaluates the expression, and if it is true (evaluates to a nonzero number), `if` executes the statement or statement block that immediately follows it and skips the statement or statement block following the `else`; otherwise, it skips the statement or statement block immediately following it and executes the statement or statement block following the `else`.

Syntax

```
if (exp) stmt1
```

```
if (exp) stmt1
else stmt2
```

```
if (exp) {
     stmts1
}
else {
     stmts2
}
    if (exp₁) ...
    else if (exp₂) ...
    else if (exp₃) ...
    ...
    else ...
```

where exp, exp_1, exp_2, exp_3, ... must evaluate to real scalars.

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Remarks and examples

`if` followed by multiple `else`s is interpreted as being nested, that is,

```
if (exp₁) . . .
else if (exp₂) . . .
else if (exp₃) . . .
. . .
else . . .
```

is equivalent to

```
if (exp₁) . . .
else {
        if (exp₂) . . .
        else {
                if (exp₃) . . .
                else {
                        . . .
                }
        }
}
```

Also see

[M-2] **Intro** — Language definition