

`if — if (exp) ... else ...`

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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.

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`.

Remarks and examples

if followed by multiple **elses** 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