Logiweb codex of check

check, L, A1, A2, A3, MP, I, $*!$, $* \Rightarrow *$,

check

[check $\overset{\text{prio}}{\rightarrow}$
Preassociative
[check], [base], [bracket $*$ end bracket], [big bracket $*$ end bracket], [$\$ * \$$],
[**flush left** [$*$]], [x], [y], [z], [[$* \bowtie *$]], [[$* \overset{*}{\rightarrow} *$]], [pyk], [tex], [name], [prio], [$*$], [T],
[if($*,*,*$)], [[$* \overset{*}{\Rightarrow} *$]], [val], [claim], [$\bot$], [f($*$)], [($*$)$^{\text{l}}$], [F], [$\underline{0}$], [$\underline{1}$], [$\underline{2}$], [$\underline{3}$], [$\underline{4}$], [$\underline{5}$], [$\underline{6}$],
[$\underline{7}$], [$\underline{8}$], [$\underline{9}$], [0], [1], [2], [3], [4], [5], [6], [7], [8], [9], [a], [b], [c], [d], [e], [f], [g], [h], [i], [j],
[k], [l], [m], [n], [o], [p], [q], [r], [s], [t], [u], [v], [w], [($*$)$^{\text{M}}$], [If($*,*,*$)],
[array{$*$} $*$ end array], [ll], [c], [r], [empty], [$\langle * \mid * := * \rangle$], [$\mathcal{M}(*)$], [$\tilde{\mathcal{U}}(*)$], [$\mathcal{U}(*)$],
[$\mathcal{U}^{\text{M}}(*)$], [**apply**($*,*$)], [**apply**$_1$($*,*$)], [identifier($*$)], [identifier$_1$($*,*$)], [array-
plus($*,*$)], [array-remove($*,*,*$)], [array-put($*,*,*,*$)], [array-add($*,*,*,*,*$)],
[bit($*,*$)], [bit$_1$($*,*$)], [rack], ["vector"], ["bibliography"], ["dictionary"],
["body"], ["codex"], ["expansion"], ["code"], ["cache"], ["diagnose"], ["pyk"],
["tex"], ["texname"], ["value"], ["message"], ["macro"], ["definition"],
["unpack"], ["claim"], ["priority"], ["lambda"], ["apply"], ["true"], ["if"],
["quote"], ["proclaim"], ["define"], ["introduce"], ["hide"], ["pre"], ["post"],
[$\mathcal{E}(*,*,*)$], [$\mathcal{E}_2(*,*,*,*,*)$], [$\mathcal{E}_3(*,*,*,*)$], [$\mathcal{E}_4(*,*,*,*)$], [**lookup**($*,*,*$)],
[**abstract**($*,*,*,*$)], [[$*$]], [$\mathcal{M}(*,*,*)$], [$\mathcal{M}_2(*,*,*,*)$], [$\mathcal{M}^*(*,*,*)$], [macro],
[s$_0$], [**zip**($*,*$)], [**assoc**$_1$($*,*,*$)], [($*$)$^{\mathbf{P}}$], [self], [[$* \overset{..}{=} *$]], [[$* \overset{.}{=} *$]], [[$* \overset{=}{=} *$]],
[[$* \overset{\text{pyk}}{=} *$]], [[$* \overset{\text{tex}}{=} *$]], [[$* \overset{\text{name}}{=} *$]], [**Priority table**[$*$]], [$\tilde{\mathcal{M}}_1$], [$\tilde{\mathcal{M}}_2(*)$], [$\tilde{\mathcal{M}}_3(*)$],
[$\tilde{\mathcal{M}}_4(*,*,*,*)$], [$\tilde{\mathcal{M}}(*,*,*)$], [$\tilde{\mathcal{Q}}(*,*,*)$], [$\tilde{\mathcal{Q}}_2(*,*,*)$], [$\tilde{\mathcal{Q}}_3(*,*,*,*)$], [$\tilde{\mathcal{Q}}^*(*,*,*)$],
[($*$)], [($*$)], [display($*$)], [statement($*$)], [[$*$] $\cdot$], [[$*$]$^-$], [**aspect**($*,*$)],
[**aspect**($*,*,*$)], [$\langle * \rangle$], [**tuple**$_1$($*$)], [**tuple**$_2$($*$)], [let$_2$($*,*$)], [let$_1$($*,*$)],
[[$* \overset{\text{claim}}{=} *$]], [checker], [**check**($*,*$)], [**check**$_2$($*,*,*$)], [**check**$_3$($*,*,*$)],
[**check***($*,*$)], [**check**$^*_2$($*,*,*$)], [[$*$] $\cdot$], [[$*$]$^-$], [[$*$]$^\circ$], [msg], [[$* \overset{\text{msg}}{=} *$]], [<stmt>],
[stmt], [[$* \overset{\text{stmt}}{\rightarrow} *$]], [HeadNil'], [HeadPair'], [Transitivity'], [$\underline{\bot\!\bot}$], [Contra'], [T$'_{\text{E}}$],
[L$_1$], [$\underline{*}$], [$\mathcal{A}$], [$\mathcal{B}$], [$\mathcal{C}$], [$\mathcal{D}$], [$\mathcal{E}$], [$\mathcal{F}$], [$\mathcal{G}$], [$\mathcal{H}$], [$\mathcal{I}$], [$\mathcal{J}$], [$\mathcal{K}$], [$\mathcal{L}$], [$\mathcal{M}$], [$\mathcal{N}$], [$\mathcal{O}$], [$\mathcal{P}$], [$\mathcal{Q}$],
[$\mathcal{R}$], [$\mathcal{S}$], [$\mathcal{T}$], [$\mathcal{U}$], [$\mathcal{V}$], [$\mathcal{W}$], [$\mathcal{X}$], [$\mathcal{Y}$], [$\mathcal{Z}$], [$\langle * \mid * := * \rangle$], [$\langle '* \mid * := * \rangle$], [$\emptyset$], [Remainder],
[($*$)$^{\mathbf{v}}$], [intro($*,*,*,*$)], [intro($*,*,*$)], [error($*,*$)], [error$_2$($*,*$)], [proof($*,*,*$)],
[proof$_2$($*,*$)], [$\mathcal{S}(*,*)$], [$\mathcal{S}^{\text{I}}(*,*)$], [$\mathcal{S}^{\triangleright}(*,*)$], [$\mathcal{S}^{\triangleright}_1(*,*,*)$], [$\mathcal{S}^{\text{E}}(*,*)$], [$\mathcal{S}^{\text{E}}_1(*,*,*)$],
[$\mathcal{S}^+(*,*)$], [$\mathcal{S}^+_1(*,*,*)$], [$\mathcal{S}^-(*,*)$], [$\mathcal{S}^-_1(*,*,*)$], [$\mathcal{S}^*(*,*)$], [$\mathcal{S}^*_1(*,*,*)$],
[$\mathcal{S}^*_2(*,*,*,*)$], [$\mathcal{S}^{@}(*,*)$], [$\mathcal{S}^{@}_1(*,*,*)$], [$\mathcal{S}^{\vdash}(*,*)$], [$\mathcal{S}^{\vdash}_1(*,*,*)$], [$\mathcal{S}^{\Vdash}(*,*)$],
[$\mathcal{S}^{\Vdash}_1(*,*,*,*)$], [$\mathcal{S}^{\text{i.e.}}(*,*)$], [$\mathcal{S}^{\text{i.e.}}_1(*,*,*,*)$], [$\mathcal{S}^{\text{i.e.}}_2(*,*,*,*,*)$], [$\mathcal{S}^{\forall}(*,*)$],
[$\mathcal{S}^{\forall}_1(*,*,*,*)$], [$\mathcal{S}^{;}(*,*)$], [$\mathcal{S}^{;}_1(*,*,*)$], [$\mathcal{S}^{;}_2(*,*,*,*)$], [$\mathcal{T}(*)$], [claims($*,*,*$)],

1

[claims$_2$(∗, ∗, ∗)], [<proof>], [proof], [[**Lemma** ∗:∗]], [[**Proof of** ∗:∗]],
[[∗ **lemma** ∗:∗]], [[∗ **antilemma** ∗:∗]], [[∗ **rule** ∗:∗]], [[∗ **antirule** ∗:∗]],
[verifier], [$\mathcal{V}_1$(∗)], [$\mathcal{V}_2$(∗, ∗)], [$\mathcal{V}_3$(∗, ∗, ∗, ∗)], [$\mathcal{V}_4$(∗, ∗)], [$\mathcal{V}_5$(∗, ∗, ∗, ∗)], [$\mathcal{V}_6$(∗, ∗, ∗, ∗)],
[$\mathcal{V}_7$(∗, ∗, ∗, ∗)], [Cut(∗, ∗)], [Head$_\oplus$(∗)], [Tail$_\oplus$(∗)], [rule$_1$(∗, ∗)], [rule(∗, ∗)],
[Rule tactic], [Plus(∗, ∗)], [[**Theory** ∗]], [theory$_2$(∗, ∗)], [theory$_3$(∗, ∗)],
[theory$_4$(∗, ∗, ∗)], [HeadNil″], [HeadPair″], [Transitivity″], [Contra″], [HeadNil],
[HeadPair], [Transitivity], [Contra], [T$_E$], [ragged right],
[ragged right expansion], [parm(∗, ∗, ∗)], [parm∗(∗, ∗, ∗)], [inst(∗, ∗)],
[inst∗(∗, ∗)], [occur(∗, ∗, ∗)], [occur∗(∗, ∗, ∗)], [unify(∗ = ∗, ∗)], [unify∗(∗ = ∗, ∗)],
[unify$_2$(∗ = ∗, ∗)], [L$_a$], [L$_b$], [L$_c$], [L$_d$], [L$_e$], [L$_f$], [L$_g$], [L$_h$], [L$_i$], [L$_j$], [L$_k$], [L$_l$], [L$_m$],
[L$_n$], [L$_o$], [L$_p$], [L$_q$], [L$_r$], [L$_s$], [L$_t$], [L$_u$], [L$_v$], [L$_w$], [L$_x$], [L$_y$], [L$_z$], [L$_A$], [L$_B$], [L$_C$],
[L$_D$], [L$_E$], [L$_F$], [L$_G$], [L$_H$], [L$_I$], [L$_J$], [L$_K$], [L$_L$], [L$_M$], [L$_N$], [L$_O$], [L$_P$], [L$_Q$], [L$_R$],
[L$_S$], [L$_T$], [L$_U$], [L$_V$], [L$_W$], [L$_X$], [L$_Y$], [L$_Z$], [L$_?$], [Reflexivity], [Reflexivity$_1$],
[Commutativity], [Commutativity$_1$], [<tactic>], [tactic], [[∗ $\overset{\text{tactic}}{=}$ ∗]], [$\mathcal{P}$(∗, ∗, ∗)],
[$\mathcal{P}$∗(∗, ∗, ∗)], [p$_0$], [conclude$_1$(∗, ∗)], [conclude$_2$(∗, ∗, ∗)], [conclude$_3$(∗, ∗, ∗, ∗)],
[conclude$_4$(∗, ∗)], [L], [A1], [A2], [A3], [MP], [I];

Preassociative

[∗_{∗}], [∗/indexintro(∗, ∗, ∗, ∗)], [∗/intro(∗, ∗, ∗)], [∗/bothintro(∗, ∗, ∗, ∗, ∗)],
[∗/nameintro(∗, ∗, ∗, ∗)], [∗′], [∗[∗]], [∗[∗→∗]], [∗[∗⇒∗]], [∗0], [∗1], [0b], [∗-color(∗)],
[∗-color∗(∗)], [∗^{H}], [∗^{T}], [∗^{U}], [∗^{h}], [∗^{t}], [∗^{s}], [∗^{c}], [∗^{d}], [∗^{a}], [∗^{C}], [∗^{M}], [∗^{B}], [∗^{r}], [∗^{i}],
[∗^{d}], [∗^{R}], [∗^{0}], [∗^{1}], [∗^{2}], [∗^{3}], [∗^{4}], [∗^{5}], [∗^{6}], [∗^{7}], [∗^{8}], [∗^{9}], [∗^{E}], [∗$^\mathcal{V}$], [∗$^\mathcal{C}$], [∗$^{\mathcal{C}^*}$], [∗!];

Preassociative

[" ∗ "], [], [(∗)$^\mathbf{t}$], [string(∗) + ∗], [string(∗) ++ ∗], [
∗], [∗], [!∗], ["∗], [#∗], [$∗], [%∗], [&∗], [’∗], [(∗], [)∗], [∗∗], [+∗], [,∗], [-∗], [.∗], [/∗],
[0∗], [1∗], [2∗], [3∗], [4∗], [5∗], [6∗], [7∗], [8∗], [9∗], [:∗], [;∗], [<∗], [=∗], [>∗], [?∗],
[@∗], [A∗], [B∗], [C∗], [D∗], [E∗], [F∗], [G∗], [H∗], [I∗], [J∗], [K∗], [L∗], [M∗], [N∗],
[O∗], [P∗], [Q∗], [R∗], [S∗], [T∗], [U∗], [V∗], [W∗], [X∗], [Y∗], [Z∗], [[∗], [\∗], []∗], [^∗],
[_∗], [‘∗], [a∗], [b∗], [c∗], [d∗], [e∗], [f∗], [g∗], [h∗], [i∗], [j∗], [k∗], [l∗], [m∗], [n∗], [o∗],
[p∗], [q∗], [r∗], [s∗], [t∗], [u∗], [v∗], [w∗], [x∗], [y∗], [z∗], [{∗], [|∗], [}∗], [~∗],
[**Preassociative** ∗; ∗], [**Postassociative** ∗; ∗], [[∗], ∗], [priority ∗ end],
[newline ∗], [macro newline ∗];

Preassociative

[∗ ’ ∗], [∗ ‘ ∗];

Preassociative

[∗ · ∗], [∗ ·$_0$ ∗];

Preassociative

[∗ + ∗], [∗ +$_0$ ∗], [∗ +$_1$ ∗], [∗ − ∗], [∗ −$_0$ ∗], [∗ −$_1$ ∗];

Preassociative

[∗ ∪ {∗}], [∗ ∪ ∗], [∗\{∗}];

Postassociative

[∗ ∴ ∗], [∗ $\underset{..}{.}$ ∗], [∗ $\underline{::}$ ∗], [∗ $\underline{+2∗}$ ∗], [∗ :: ∗], [∗ +2∗ ∗];

Postassociative

[∗, ∗];

Preassociative

[∗ $\overset{B}{\approx}$ ∗], [∗ $\overset{D}{\approx}$ ∗], [∗ $\overset{C}{\approx}$ ∗], [∗ $\overset{P}{\approx}$ ∗], [∗ ≈ ∗], [∗ = ∗], [∗ $\xrightarrow{}$ ∗], [∗ $\overset{t}{=}$ ∗], [∗ $\overset{t^*}{=}$ ∗], [∗ $\overset{r}{=}$ ∗],

2

$[* \in_t *], [* \subseteq_T *], [* \overset{T}{=} *], [* \overset{s}{=} *], [* \text{ free in } *], [* \text{ free in}^* *], [* \text{ free for } * \text{ in } *],$
$[* \text{ free for}^* * \text{ in } *], [* \in_c *], [* < *], [* <' *], [* \leq' *];$

Preassociative

$[\neg *];$

Preassociative

$[* \wedge *], [* \ddot{\wedge} *], [* \tilde{\wedge} *], [* \wedge_c *];$

Preassociative

$[* \vee *], [* \parallel *], [* \ddot{\vee} *];$

Postassociative

$[* \ddot{\Rightarrow} *], [* \Rightarrow *];$

Postassociative

$[* : *], [* \text{ spy } *], [*!*];$

Preassociative

$[* \left\{ \begin{array}{c} * \\ * \end{array} \right.];$

Preassociative

$[\lambda * . *], [\Lambda * . *], [\Lambda *], [\textbf{if } * \textbf{ then } * \textbf{ else } *], [\textbf{let } * = * \textbf{ in } *], [\textbf{let } * \overset{.}{=} * \text{ in } *];$

Preassociative

$[*^I], [*^{\rhd}], [*^V], [*^+], [*^-], [*^*];$

Preassociative

$[* @ *], [* \rhd *], [* \rhd\!\!\!\rhd *], [* \gg *];$

Postassociative

$[* \vdash *], [* \Vdash *], [* \text{ i.e. } *];$

Preassociative

$[\forall *: *];$

Postassociative

$[* \oplus *];$

Postassociative

$[*; *];$

Preassociative

$[* \text{ proves } *];$

Preassociative

$[* \textbf{ proof of } * : *], [\text{Line } * : * \gg *; *], [\text{Last line } * \gg * \square],$
$[\text{Line } * : \text{Premise} \gg *; *], [\text{Line } * : \text{Side-condition} \gg *; *], [\text{Arbitrary} \gg *; *],$
$[\text{Local} \gg * = *; *];$

Postassociative

$[* \text{ then } *], [*[*]*];$

Preassociative

$[*\&*];$

Preassociative

$[* \backslash\backslash *];]$

$[\text{check} \overset{\text{pyk}}{\rightarrow} \text{"check"}]$

L

[L $\overset{\text{stmt}}{\rightarrow}$ [∀<u>a</u>: ∀<u>b</u>: ∀<u>c</u>: [[<u>a</u> ⇒ [<u>b</u> ⇒ <u>c</u>]] ⇒ [[<u>a</u> ⇒ <u>b</u>] ⇒ [<u>a</u> ⇒ <u>c</u>]]]] ⊕
[[∀<u>a</u>: ∀<u>b</u>: [<u>a</u> ⊢ [[<u>a</u> ⇒ <u>b</u>] ⊢ <u>b</u>]]] ⊕ [[∀<u>a</u>: ∀<u>b</u>: [<u>a</u> ⇒ [<u>b</u> ⇒ <u>a</u>]]]
⊕ ∀<u>a</u>: ∀<u>b</u>: [[[¬<u>b</u>] ⇒ ¬<u>a</u>] ⇒ [[[¬<u>b</u>] ⇒ <u>a</u>] ⇒ <u>b</u>]]]]]

[L $\overset{\text{tex}}{\rightarrow}$ "
L"]

[L $\overset{\text{pyk}}{\rightarrow}$ "propositional calculus"]

A1

[A1 $\overset{\text{proof}}{\rightarrow}$ Rule tactic]

[A1 $\overset{\text{stmt}}{\rightarrow}$ L ⊢ ∀<u>a</u>: ∀<u>b</u>: [<u>a</u> ⇒ [<u>b</u> ⇒ <u>a</u>]]]

[A1 $\overset{\text{tex}}{\rightarrow}$ "
A1"]

[A1 $\overset{\text{pyk}}{\rightarrow}$ "propositional a one"]

A2

[A2 $\overset{\text{proof}}{\rightarrow}$ Rule tactic]

[A2 $\overset{\text{stmt}}{\rightarrow}$ L ⊢ ∀<u>a</u>: ∀<u>b</u>: ∀<u>c</u>: [[<u>a</u> ⇒ [<u>b</u> ⇒ <u>c</u>]] ⇒ [[<u>a</u> ⇒ <u>b</u>] ⇒ [<u>a</u> ⇒ <u>c</u>]]]]

[A2 $\overset{\text{tex}}{\rightarrow}$ "
A2"]

[A2 $\overset{\text{pyk}}{\rightarrow}$ "propositional a two"]

A3

[A3 $\overset{\text{proof}}{\rightarrow}$ Rule tactic]

[A3 $\overset{\text{stmt}}{\rightarrow}$ L ⊢ ∀<u>a</u>: ∀<u>b</u>: [[[¬<u>b</u>] ⇒ ¬<u>a</u>] ⇒ [[[¬<u>b</u>] ⇒ <u>a</u>] ⇒ <u>b</u>]]]

[A3 $\overset{\text{tex}}{\rightarrow}$ "
A3"]

[A3 $\overset{\text{pyk}}{\rightarrow}$ "propositional a three"]

MP

[MP $\overset{\text{proof}}{\to}$ Rule tactic]

[MP $\overset{\text{stmt}}{\to}$ L ⊢ ∀<u>a</u>: ∀<u>b</u>: [<u>a</u> ⊢ [[<u>a</u> ⇒ <u>b</u>] ⊢ <u>b</u>]]]

[MP $\overset{\text{tex}}{\to}$ "
MP"]

[MP $\overset{\text{pyk}}{\to}$ "propositional modus ponens"]

I

[I $\overset{\text{proof}}{\to}$ λc.λx.𝒫(⌈L ⊢ ∀<u>a</u>: [[A1 ≫ [<u>a</u> ⇒ [[<u>a</u> ⇒ <u>a</u>] ⇒ <u>a</u>]]] ; [[A1 ≫ [<u>a</u> ⇒ [<u>a</u> ⇒ <u>a</u>]]] ; [[A2 ≫ [[<u>a</u> ⇒ [[<u>a</u> ⇒ <u>a</u>] ⇒ <u>a</u>]] ⇒ [[<u>a</u> ⇒ [<u>a</u> ⇒ <u>a</u>]] ⇒ [<u>a</u> ⇒ <u>a</u>]]]] ; [[[MP ▷ [<u>a</u> ⇒ [[<u>a</u> ⇒ <u>a</u>] ⇒ <u>a</u>]]] ▷ [[<u>a</u> ⇒ [[<u>a</u> ⇒ <u>a</u>] ⇒ <u>a</u>]] ⇒ [[<u>a</u> ⇒ [<u>a</u> ⇒ <u>a</u>]] ⇒ [<u>a</u> ⇒ <u>a</u>]]]] ≫ [[<u>a</u> ⇒ [<u>a</u> ⇒ <u>a</u>]] ⇒ [<u>a</u> ⇒ <u>a</u>]]] ; [[[MP ▷ [<u>a</u> ⇒ [<u>a</u> ⇒ <u>a</u>]]] ▷ [[<u>a</u> ⇒ [<u>a</u> ⇒ <u>a</u>]] ⇒ [<u>a</u> ⇒ <u>a</u>]]] ≫ [<u>a</u> ⇒ <u>a</u>]]]]] ⌉, p_0, c)]

[I $\overset{\text{stmt}}{\to}$ L ⊢ ∀<u>a</u>: [<u>a</u> ⇒ <u>a</u>]]

[I $\overset{\text{tex}}{\to}$ "
I"]

[I $\overset{\text{pyk}}{\to}$ "propositional identity"]

∗!

[n! $\overset{\text{val}}{\to}$ If(n ≈ 0, 1, n · [[n − 1] !])]

[n! $\overset{\text{tex}}{\to}$ "#1.
\char33"]

[n! $\overset{\text{pyk}}{\to}$ "∗ factorial"]

∗ ⇒ ∗

[x ⇒ y $\overset{\text{tex}}{\to}$ "#1.
\Rightarrow #2."]

[x ⇒ y $\overset{\text{pyk}}{\to}$ "∗ imply ∗"]

The pyk compiler, version 0.grue.20060417 by Klaus Grue

GRD-2006-03-23.UTC:14:12:03.840322 = MJD-53817.TAI:14:12:36.840322 = LGT-4649839956840322e-6