Combinatori

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Forma di Backus-Naur

$$T ::= V \mid \lambda V.\, T \mid (T\, T)$$

λ calcolo

$$
\begin{aligned}
I &:= \lambda x.\, x \\
K &:= \lambda x.\, \lambda y.\, x \\
S &:= \lambda xyz.\, x\, z\, (y\, z) \\
B &:= \lambda xyz.\, x\, (y\, z) \\
C &:= \lambda xyz.\, x\, z\, y \\
W &:= \lambda xy.\, x\, y\, y \\
\omega &:= \lambda x.\, x\, x \\
\Omega &:= (\lambda x.\, x\, x)\, (\lambda x.\, x\, x) \\
Y &:= \lambda f.\, (\lambda x.\, f\, (x\, x))\, (\lambda x.\, f\, (x\, x)) \\
\Theta &:= (\lambda xy.\, y\, (x\, x\, y))\, (\lambda xy.\, y\, (x\, x\, y))
\end{aligned}
$$

SKI caclolo

$$
\begin{aligned}
I &:= S\, K\, K \\
Y &:= S\, (K\, (S\, I\, I))(S\, (S\, (K\, S)\, K)\, (K\, (S\, I\, I)))
\end{aligned}
$$