

$$(\lambda x. (\underbrace{x \ x}_E) \ \underbrace{\lambda x. (x \ x)}_M)$$

$$\xrightarrow{\beta} (x \ x) \{ \lambda x. (x \ x) \mid x \}$$

$$= (\lambda x. (x \ x) \ \lambda x. (x \ x))$$

$$\left(\lambda x. \underbrace{\lambda x. x}_E \ (\underbrace{\lambda x. (x \ x) \ \lambda x. (x \ x)}_M) \right)$$

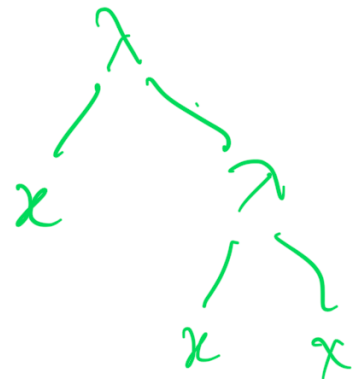
$$\xrightarrow{\beta} \lambda x. x$$

NORMAL

∞ - loop

APPLICATIVE

$$\lambda x. \lambda x. x$$



$$\xrightarrow{\alpha} \lambda x. \lambda y. y$$

$$\lambda x. (\lambda x. x \ x)$$