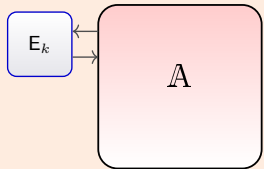


$\text{Exp}_E^{\text{prp-real}}(\mathcal{A})$

$k \leftarrow_s \text{Kg}$



$\text{Exp}_E^{\text{prp-ideal}}(\mathcal{A})$

$\pi \leftarrow_s \text{Perm}(X)$

