

$$\begin{array}{ccc}
 s(j) & \xrightarrow{u_j} & X \\
 j \downarrow & \circlearrowleft & \downarrow f \\
 t(j) & \xrightarrow{d_j} & Y
 \end{array}$$

$$\begin{array}{ccccc}
 \coprod_j s(j) & \xrightarrow{(u_j)} & X_0 & & \\
 \coprod_j j \downarrow & \text{PO} & \downarrow & \searrow f & \\
 \coprod_j t(j) & \longrightarrow & X_1 & \dashrightarrow f_1 & \\
 & & \searrow (d_j) & \nearrow & \\
 & & & & Y
 \end{array}$$