

$$\begin{array}{ccccccccccc}
 \dots & \xrightarrow{d_3} & P_2 & \xrightarrow{d_2} & P_1 & \xrightarrow{d_1} & P_0 & \xrightarrow{d_0} & \mathbb{Z} & \longrightarrow & 0 \\
 & & \searrow h_2 & & \searrow h_1 & & \searrow h_0 & & & & \\
 & & \alpha_2 \downarrow & & \beta_2 \downarrow & & \alpha_1 \downarrow & & \beta_0 \downarrow & & \alpha_0 \downarrow \\
 & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 \dots & \longrightarrow & Q_2 & \xrightarrow{d_2} & Q_1 & \xrightarrow{d_1} & Q_0 & \xrightarrow{d_0} & \mathbb{Z} & \longrightarrow & 0
 \end{array}$$