$$F \left[\begin{array}{ccc} \operatorname{Cat} & \operatorname{Cat} & G & \operatorname{C}_{1} & \xrightarrow{J_{1}} & \operatorname{D}_{1} \\ \operatorname{C}_{2} & \xrightarrow{Cat} & \operatorname{D}_{2} & F & H \left| \operatorname{Cat} & \operatorname{Cat} & K & G \\ H \left| \begin{array}{ccc} \operatorname{Cat} & \operatorname{Cat} & K & \operatorname{C}_{3} & \xrightarrow{Cat} & \operatorname{D}_{3} \\ \operatorname{C}_{3} & \xrightarrow{f} & \operatorname{D}_{3} & & \end{array} \right]$$

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