## Databases Autumn 2025 Hand-In Exercise 1

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Total Points

Task	Points	
	I	

This template showcases various useful latex commands and setups. Remove this for your actual hand-in.

## Task 1

Relational algebra is a treat with LATEX, as can be seen in Equation (1):

$$\pi \left[ Attribute1, Attribute2 \right] \left( \sigma \left[ Attribute = Something \right] \left( Entity1 \right) \bowtie Entity2 \right)$$
 (1)

## Task 2

(a) Person on Name:

$$\sigma [Name =' ChristopherNolan'] (Person)$$
 (2)

Activity on SceneAuthor:

$$\sigma \left[Activity = 'director'\right] \left(Scene Author\right) \tag{3}$$

Add join on both:

$$\pi \left[ MovieID, SceneID \right] \left( \sigma \left[ Name = 'ChristopherNolan' \wedge Activity = 'director' \right] \left( Person \bowtie SceneAuthor \right) \right) \tag{4}$$