

Datenbanken I

Blatt 2

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1 Aufgabe

Person = {p_id : *number*, firstname : *string*, lastname : *string*}

acts = {p_id : *number*, m_id : *number*, role : *string*}

Movie = {m_id : *number*, title : *string*, year : *number*, Oscars : *number*, Genre : *string*, FSK : *number*,
language : *string*, length : *number*, directedBy : *number*}

Cinema = {name : *string*, location : *string*}

Room = {RoomNr : *number*, inName : *string*, inLocation : *string*, size : *number*}

screening = {m_id : *number*, RoomNr : *number*, inName : *string*, inLocation : *string*,
date : *date*, time : *number*, price : *number*}

2 Aufgabe

2.1 Select the titles of all movies that were directed by Friedrich Wilhelm Murnau.

```
1  πtitle (  
2      σfirstname = 'Friedrich Wilhelm' ∧ lastname = 'Murnau' (  
3          Movie ⋈ Person  
4      )  
5  )
```

2.2 Select the titles of all movies that were directed by Tim Burton and none of the actors is Johnny Depp.

```
1  πtitle (  
2      σfirstname = 'Tim' ∧ lastname = 'Burton' (  
3          Movie ⋈ Person  
4      )  
5  ) - πtitle (  
6      σfirstname = 'Johnny' ∧ lastname = 'Depp' (  
7          (Movie ⋈ acts) ⋈ Person  
8      )  
9  )
```

2.3 Select the movie title, the name and location of the cinema, and the time and price of all movies that are shown today and have the genre Documentary.

```
1  πtitle, name, location, time, price (  
2      σdate = 2016-05-05 ∧ Genre = 'Documentary' (  
3          Movie ⋈ screening  
4      )  
5  )
```