Timestamps of **S**earches

1,12,15, 76,79,81, 116,119,135

Concrete

Data Abstraction

Timestamps of **S**earches

1 50 51 100 101 150

Interval Map

Users that **S**earch

Users that **R**eview

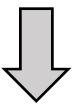
Users that **P**urchase

$$-1,2,3,4,5$$
 $-1,4,5$ $-1,7$

$$\cap \dashv$$

$$\cap$$

Predicate Abstraction \(\sqrt{} \)



Users that Purchase