6.7. Constraint-Based Pattern Mining: Constrained Mining with Convertible Constraints
In-Lecture Question

Question

Given a sorted sequence $x_1, x_2, x_3, \ldots, x_N$, the median is $\dfrac{x_{\left\lfloor \frac{N+1}{2} \right\rfloor} + x_{\left\lceil \frac{N+1}{2} \right\rceil}}{2}$

True or false? The constraint median(S.price) ≥ 10 convertible is anti-monotonic.

- ❑ True
- ❑ False

Question

Given a sorted sequence $x_1, x_2, x_3, \ldots, x_N$, the median is $\dfrac{x_{\left\lfloor\frac{N+1}{2}\right\rfloor} + x_{\left\lceil\frac{N+1}{2}\right\rceil}}{2}$

True or false? The constraint median(S.price) $\geq$ 10 convertible is anti-monotonic.

- ❑ True
- ❑ False

- ❑ **Answer:** True
- ❑ **Explanation:** If we sort the items in each transaction by their prices in descending order, median(S.price) $\geq$ 10 becomes anti-monotonic.