PROBLEM OF THE WEEK 10 Due Wednesday, November 20 at 5:00 pm

Question. Let $A = \{1, 2, ..., 10\}$. Let B be a set defined as follows:

- 1. Elements of B are subsets of A.
- 2. For any distinct pair of elements $S, T \in B$ we have $S \not\subseteq T$ and $T \not\subseteq S$.

What is the largest number of elements B can have?

- All answers should be clearly explained. Submit it to the Math/Stat Office, AMB 107.
- If your instructor gives you credit for POTW, write his/her name with the class number.
- Contact Bahattin Yildiz with questions: bahattin.yildiz@nau.edu (AMB 134)