

# GREEDY-SET-COVER( $X, \mathcal{F}$ )

1  $U_0 = X$

2  $\mathcal{C} = \emptyset$

3  $i = 0$

4 **while**  $U_i \neq \emptyset$

5     select  $S \in \mathcal{F}$  that maximizes  $|S \cap U_i|$

6      $U_{i+1} = U_i - S$

7      $\mathcal{C} = \mathcal{C} \cup \{S\}$

8      $i = i + 1$

9 **return**  $\mathcal{C}$