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**Algorithm 1:** greedy-explanations( $I_0, T_p$ )

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1  $I_{end} \leftarrow \text{propagate}(I_0 \wedge T_p)$ ;  
2  $\text{Seq} \leftarrow$  empty sequence;  
3  $I \leftarrow I_0$ ;  
4 while  $I \neq I_{end}$  do  
5    $(E, S, N) \leftarrow \text{min-explanation}(I, T_p)$ ;  
6    $I \leftarrow I \cup N$ ;  
7 end
```

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**Algorithm 2:** min-explanations( $I, C$ )

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input : A partial interpretation  $I$  and a set of constraints  $C$   
1  $\text{candidates} \leftarrow \emptyset$ ;  
2  $J \leftarrow \text{propagate}(I \wedge C)$ ;  
3 for  $a \in J \setminus I$  do  
4    $X \leftarrow \text{OMUS}(\neg a \wedge I \wedge S)$ ;  
5    $E \leftarrow I \cap X$ ;  
6    $S \leftarrow C \cap X$ ;  
7    $A \leftarrow \text{propagate}(E \wedge S)$ ;  
8   return  $(E, S, A)$   
9 end
```

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