1. Do Exercise 8.7.2 in Soare. [Here “limit point” has its usual topological meaning.]

2. Do Exercises 3.11 and 3.24 in *Slicing the Truth*.

3. Read Theorem 2.19.10 in Downey and Hirschfeldt, then do the following problem.

Let $T$ be an infinite computable binary tree with no computable paths and let $C_0, C_1, \ldots$ be noncomputable sets. Let $D = \bigoplus_i C'_i = \{\langle i, n \rangle : n \in C'_i\}$. Show that $T$ has a path $P$ such that $P \upharpoonright T C'_i$ for all $i$ and $P' \leq_T D$. (Here $P \upharpoonright_T C_i$ means that $P \not\leq_T C_i$ and $C_i \not\leq_T P$.) [The only significant new aspect is making sure that $P$ avoids the lower cone below each $C_i$ in addition to avoiding the upper cone above each $C_i$. The fact that $T$ has no computable paths is of course crucial here.]