

3 Iteration, lists, and efficiency – Part 2 —Answers

Answers

Work through these after you have tried the questions yourself.

2.1 it repeats a block of steps (either a set number of times or while a condition holds).

2.2 an ordered collection of many values stored under one name, each reached by its position.

2.3 about 4 checks ($16 \rightarrow 8 \rightarrow 4 \rightarrow 2 \rightarrow 1$).

2.4 the list must be sorted.

2.5 a reasonable-time algorithm's work grows slowly enough to stay practical as the input grows; an unreasonable-time one grows so fast it becomes impossible for large inputs.