9 Algorithm Design and Problem-solving – Part 1 — Answers

Answers

9.1 Breaking a large problem into smaller, easier sub-problems that can be solved one at a time.

9.2 Keeping only the important details of a problem and ignoring the rest.

9.3 Selection.

9.4 Sequence, selection and iteration.

9.5 For example:

```
INPUT a
INPUT b
sum ← a + b
OUTPUT sum
```

9.6 Each small part is simpler to understand, can be written and tested on its own, and several people can work on different parts at once; bugs are easier to find because each part is checked separately.

9.7 For example:

```
total ← 0
INPUT n
WHILE n <> 0 DO
total ← total + n
INPUT n
ENDWHILE
OUTPUT total
```