

CSC148:
RECURSION II

20161026

DEF SUM-NESTED-LIST (LST):

1 → S = 0

2 → FOR ITEM IN LST:

3 → IF ITEM IS A NESTED LIST

4 → → S += SUM-NESTED-LIST (LST)

⇓

LOGICPL EQW. WHAT IF LST IS AN INT?

⇓

→ IF INSTANCE(LST, INT):

→ → ELSE: RETURN LST

→ → [GOTO 1]



: RECURSIVE DEFINITIONS BUILD ABSTRACTIONS

① BASE CASE

A BRANCH IN THE CODE NOT CALLING THE FUNCTION ITSELF.

CORRESPONDS DIRECTLY TO THE TRIVIAL APPLICATION OF THE DEFINITION TO THE SIMPLEST ELEMENT.

② RECURSIVE STEP

A BRANCH IN THE CODE WHICH INCLUDES A CALL TO THE FUNCTION ITSELF.