

Solution 40 Test (Conditional Expressions)

Solution 40 (c) - viewed function with conditional

Recursive definition using conditional expression:

viewed $\lambda x. = \lambda x.$

viewed $\lambda x. s = ifx.3 = yesthen < x >^v iewedselsevieweds$

Solution 40 (d) - cumulative_t otal recursive function

$$\frac{\begin{array}{l} cumulative_t otal : seq\ Title * Length * Viewed \rightarrow N \\ cumulative_t otal(\langle \rangle) = 0 \end{array}}{cumulative_t otal(\langle \rangle)}$$

Note: forall with semicolon-separated bindings not yet supported

Solution 41 (c) - 479_c ourses with conditional

forall x : Entry; s : seq Entry —

479_c ourses(<>) = <>

479_c ourses(< x >^s) = ifx.3 = 479 then < x >⁴ 79_c ourses else 479_c ourses

Solution 41 (d) - total function

forall x : Entry; s : seq Entry —

total ($\lambda x. = \lambda x.$) = 0

total ($\lambda x. s$) = $x.5 + totals$