Solution 40 Test (Conditional Expressions)

Solution 40 (c) - viewed function with conditional

Recursive definition using conditional expression:

viewed $\langle\rangle = \langle\rangle$

viewed $\langle x\rangle$ s = if$x.3 = yesthen\langle x\rangle\ ^{v}iewedselsevieweds$

Solution 40 (d) - cumulative$_{t}otalrecursivefunction$

$$\frac{cumulative\_total : \text{seq}\ Title * Length * Viewed \to \mathbb{N}}{cumulative\_total(\langle\rangle) = 0}$$

Note: ∀ with semicolon-separated bindings not yet supported

Solution 41 (c) - 479$_{c}ourseswithconditional$

$\forall\ x : Entry; s : seqEntry \mid$

479$_{c}ourses(\langle\rangle) = \langle\rangle$

479$_{c}ourses(\langle x\rangle\ ^{s}) = ifx.3 = 479then\langle x\rangle\ ^{4}79_{c}oursesselse479_{c}oursess$

Solution 41 (d) - total function

$\forall\ x : Entry; s : seqEntry \mid$

total $(\langle\rangle) = 0$

total $(\langle x\rangle\ ^{s}) = x.5 + totals$