

```

1  (require spd/tags)
2
3  (@htdd Movie)
4  (define-struct movie (title budget year))
5  ;; Movie is (make-movie String Natural Natural)
6  ;; interp. a movie with title, budget in USD, and year released
7  (define M1 (make-movie "Titanic" 200000000 1997))
8  (define M2 (make-movie "Avatar" 237000000 2009))
9  (define M3 (make-movie "The Avengers" 220000000 2012))
10
11 (@dd-template-rules compound) ;3 fields
12
13 (define (fn-for-movie m)
14   (... (movie-title m)      ;String
15        (movie-budget m)    ;Natural
16        (movie-year m)))   ;Natural
17
18
19 (@htdf most-recent-title)
20 (@signature Movie Movie -> String)
21 ;; produce title of most recently released movie
22 (check-expect (most-recent-title M1 M2) "Avatar")
23 (check-expect (most-recent-title M2 M1) "Avatar")
24 (check-expect (most-recent-title M3 M2) "The Avengers")
25
26 (@template-origin Movie)
27
28 (@template
29  (define (most-recent-title m1 m2)
30    (... (movie-title m1)
31         (movie-budget m1)
32         (movie-year m1)
33         (movie-title m2)
34         (movie-budget m2)
35         (movie-year m2))))
36
37 (define (most-recent-title m1 m2)
38   (if (>= (movie-year m1) (movie-year m2))
39       (movie-title m1)
40       (movie-title m2)))
41
42
43 #|
44
45 [A] M1 and M2 are evaluated to operands before the function call in
45 line 22.
46
47 [B] The parameters of the function call expression in line 22 are M1
47 and M2.
48
49 [C] The test thoroughness is complete for most-recent-title.
50
51 [D] The purpose fully describes the behaviour of most-recent-title.
52
53 [E] All steps from the HTDF recipe are present.
54

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55 | [F] The function body spans from lines 37 to 40.  
56 |  
57 | [G] The false answer in the function body of most-recent-title  
57 | contains a call to a selector.  
58 |  
59 | [H] Movie is an itemization with 3 atomic non-distinct fields.  
60 |  
61 | [I] Line 4 contains the structure definition of Movie.  
62 |  
63 | #
```