```
1  (require spd/tags)
2
3  (@assignment bank/htdd-p3)
4
5  ;; =================
6  ;; Data definitions:
7
8  (@htdd RocketDescent)
9  ;; RocketDescent is one of:
10 ;; - Number
11 ;; - false
12 ;; interp. false if rocket's descent has ended, otherwise number of kilometers
13 ;;         left to Earth, restricted to (0, 100]
14 (define RD1 100)
15 (define RD2 40)
16 (define RD3 0.5)
17 (define RD4 false)
18
19 (@dd-template-rules one-of              ;2 cases
20                      atomic-non-distinct ;Number
21                      atomic-distinct)    ;false
22
23 (define (fn-for-rocket-descent rd)
24   (cond [(number? rd) (... rd)]
25         [else  (...)]))
26
27
28
29 ;; =================
30 ;; Functions:
31
32 (@htdf rocket-descent-to-msg)
33 (@signature RocketDescent -> String)
34 ;; outputs a Twitter update on rocket's descent distance
35 (check-expect (rocket-descent-to-msg  100) "Altitude is 100 kms.")
36 (check-expect (rocket-descent-to-msg  40) "Altitude is 40 kms.")
37 (check-expect (rocket-descent-to-msg  .5) "Altitude is 1/2 kms.")
38 (check-expect (rocket-descent-to-msg  false) "The rocket has landed!")
39
40 ;(define (rocket-descent-to-msg rd) "")  ;stub
41
42 (@template-origin RocketDescent)
43
44 (@template
45  (define (rocket-descent-to-msg rd)
46    (cond [(number? rd) (... rd)]
47          [else  (...)])))
48
49 (define (rocket-descent-to-msg rd)
50   (cond [(number? rd)
51          (string-append "Altitude is " (number->string rd) " kms.")]
52         [else
53          "The rocket has landed!"]))
54
```

A

B

C

D

E

F