

# Word Problem: update-player

**Directions :** The player moves up and down by 20 pixels each time. Write a function called `update-player` , which takes in the player's y-coordinate and the name of the key pressed ("up" or "down"), and returns the new y-coordinate.

## Contract and Purpose Statement

Every contract has three parts...

; update-player : Number String -> Number  
*function name* *domain* *range*

; Produce new y-coordinate depending on key pressed  
*what does the function do?*

## Examples

Write some examples, then circle and label what changes...

(EXAMPLE (update-player 320 "up") (+ 320 20) )  
*function name* *input(s)* *what the function produces*

(EXAMPLE (update-player 100 "up") (+ 100 20) )  
*function name* *input(s)* *what the function produces*

(EXAMPLE (update-player 320 "down") (- 320 20) )  
*function name* *input(s)* *what the function produces*

(EXAMPLE (update-player 100 "down") (- 100 20) )  
*function name* *input(s)* *what the function produces*

## Definition

Write the definition, giving variable names to all your input values...

(define (update-player y key)  
*function name* *variable(s)*

(cond \_\_\_\_\_

[(string=? "up" key) (+ y 20)]

[(string=? "down" key) (- y 20)]

[else y]

))  
*what the function does with those variable(s)*