Homework 13

2. change game-over? function.

include a check to see if the current has a any valid-move.

If the current player doesn't have any valid moves return true

1. creak list of four possibles moves. → map

2. valid-move ? Use. or-map.

inside lambda

3.b

[(country-hemisphere -]

match

→ constant → for functions

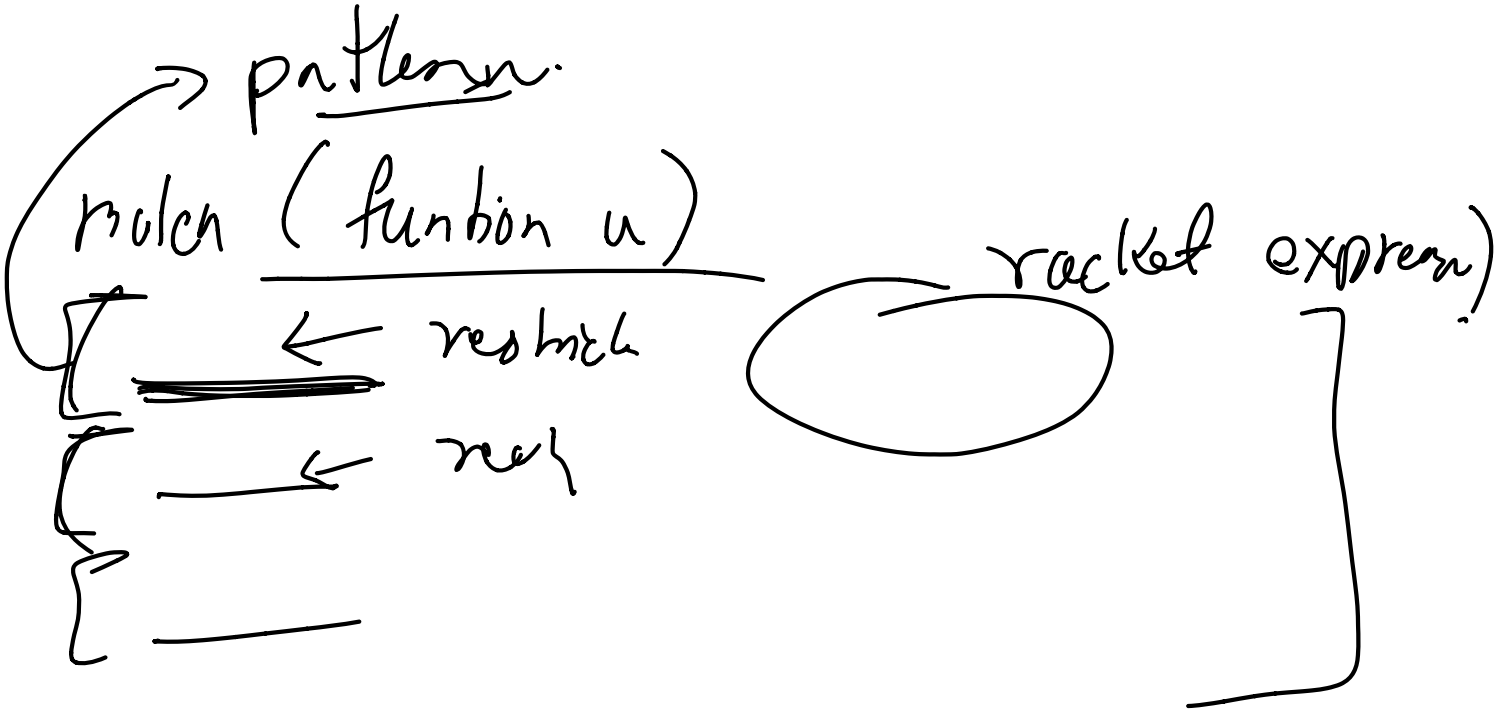
→ variables — match with anything

(+ i 1)

(Point x y) ← left
pattern matching

(Point 1 y)

(Point (+ x 1) (+ y 1))



```
(match (function a)

[(Hemisphere _ _)

(match ((country-hemisphere
          c1) (country-hemisphere
                c2))

((Hemisphere lll la1)
  (Hemisphere ll2 la2) (do your check
                        ))
```

Time - complexity

```
(define (f n))
  (+ (f (- n 1)) (f (- n 2)))
```

$$T(n) = T(n-1) + T(n-2)$$

Assuming Time complexity of f: $T(n)$

```
(define (f n))
  (+ (g (- n 1)) (f (- n 2)))
```

$$T(n) = O(n-1) + T(n-2)$$

$$= O(n)$$

Say $S(n)$ is time complexity of $y(n)$

$$T(n) = T(n-1) + 10n$$

$$\Rightarrow T(n) \equiv T(n-1) + O(n)$$

Suppose you know

$$S(n) = \underline{O(n)}$$