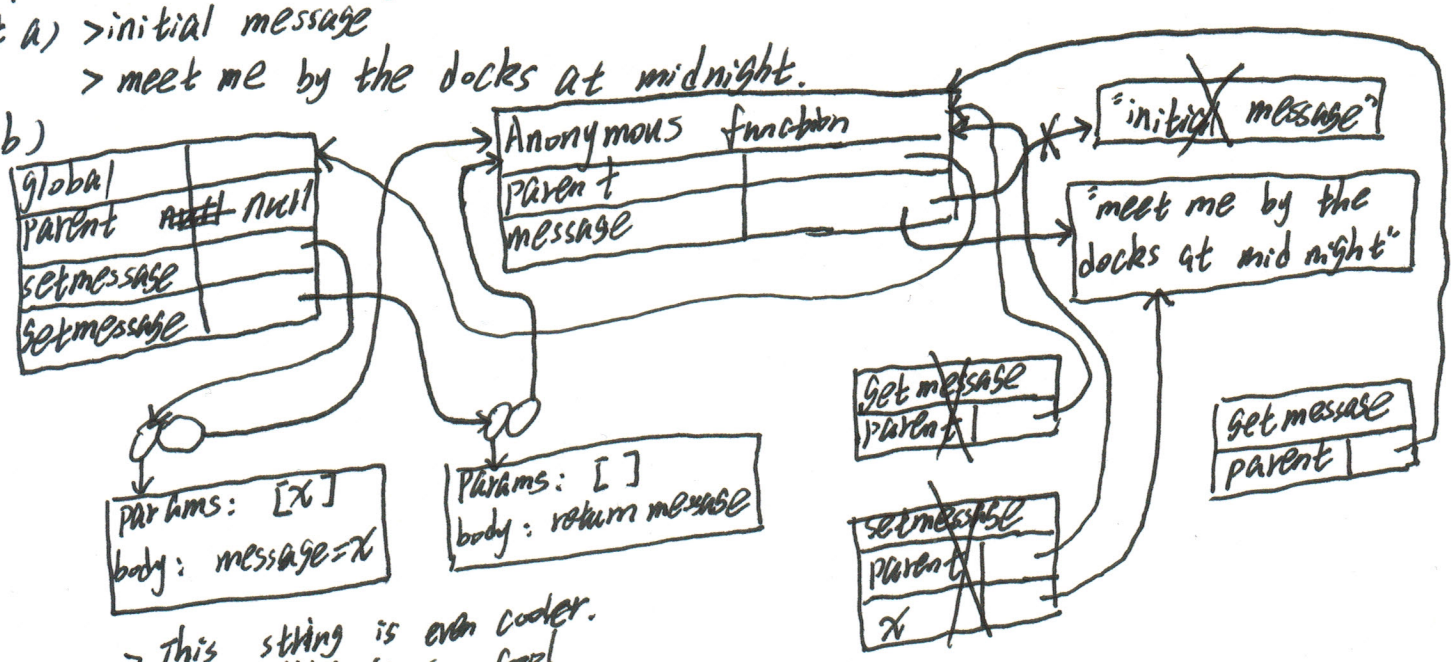
CS164 HW2 Jianzhong Chen.

1. part a) >initial message
> meet me by the docks at midnight.

part b)



part C) > This string is even cooler.
> This string is so cool.

part d) > This string is even cooler.
> This string is the coolest.

2. part a) >L
>L
>L

part b) >C
>A
>L

Because in JS. blocks do not create new scopes, only functions will create new scope.

part C) Yes. since JS is function-level scope, only function can create new scope, so each function in lambdas does not have distinct ~~index~~ index, instead they have the same copy of index.

part d)
```
array = ["C", "A", "L"]
lambdas = [ ]
for index in range(len(array)):
    lambdas.append((lambda x: array[x])(index))
print lambdas[0]
print lambdas[1]
print lambdas[2]
```

And the out put is: C
A
L

3. part a)

~~"for": "(lambda(){~~

~~"for": while(x= iterator.next)~~

~~"for": while(condition, lambda~~

```
"for": (lambda(){ def %u1=%iterator.next;
                  while(%u1 != null){
                      %name = %u1;
                      %body();
                  }
```

part b)

```
"for": (lambda(){ def %u1=%iterator.
                  while(%u1 != null){
                      (lambda(){
                          %name = %u1;
                          %body();
                      })();
                  })();
```