

# Programming Paradigms

## Class Activity #6

Q1:

```
fibonacci = (n) ->
  if n < 0
    return null
  if n == 0 || n == 1
    return n

  lastTwo = 0
  lastOne = 1
  output = null
  for i in [2..n]
    temp = lastOne
    lastOne = lastTwo + lastOne
    lastTwo = temp

  return lastOne
```

Q2:

```
a = 0 # scope? global
b = 1 # scope? global
```

```
myFunction = (a) ->
  a = 100 # scope? global
  b = 200 # scope? global
  d = 300 # scope? local
  e = 400 # scope? local
```

```
myFunction()
```



```
var a = 0; // scope? global
let c = 2; // scope? global
myFunction = () => {
  var a = 100; // scope? local to myFunction()
  b = 200; // scope? global
  var d = 300; // scope? local to myFunction()
  let e = 400; // scope? local to myFunction() → because it is declared on the function
  block
}
myFunction()
```



