

Programming Paradigms

Class Activity #5

Q1:

```
let fibGenerator = function () {  
  
  // initial value for n  
  let n = 0;  
  // tracks the last two values  
  let lastTwo = 0, lastOne = 1;  
  
  return () => {  
    // base cases  
    if( n === 0 || n === 1){  
      n++;  
      return n - 1; // dec by one because n was already incremented  
    }  
  
    // other cases  
    let output = lastTwo + lastOne;  
    lastTwo = lastOne;  
    lastOne = output;  
    n++;  
    return output;  
  };  
};
```

Q2:

(a) Prints 10

(b) Prints 6

Q3:

Both are higher order functions because:

- greaterThan: Returns a function
- matchesCriteria: takes a function as a parameter
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Q4:

Compile: the process of converting source code to machine (executable) code.

Transpile: the process of converting source code into another source code (in a different programming language at a similar level of abstraction).

