CHALLENGES O

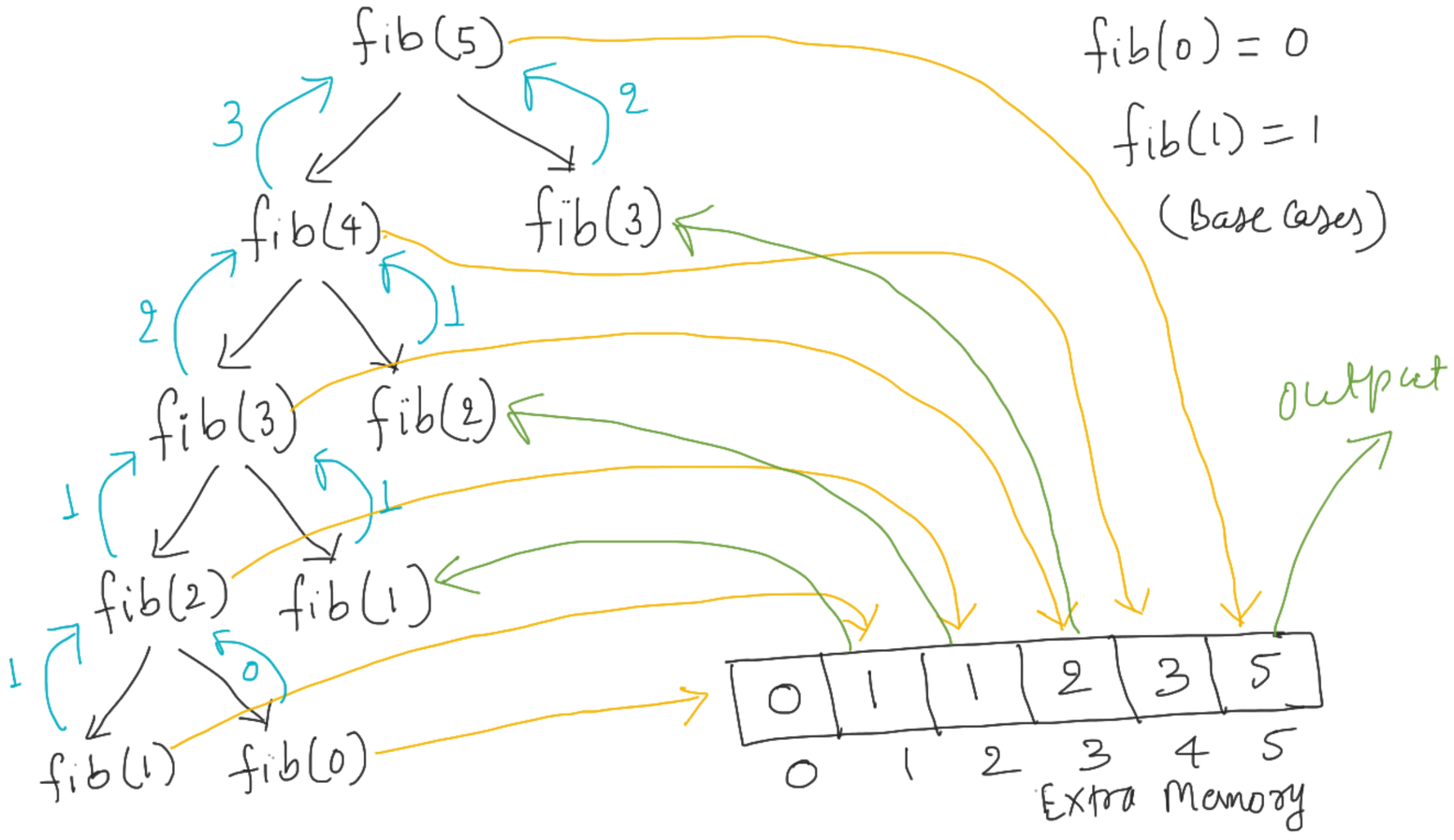
TOPIC 01: WHAT'S THE TOP-DOWN APPROACH AND HOW TO APPLY TO THE ASSIGNMENT?

WHAT'S A TOP-DOWN APPROACH?

- In the top-down approach, first, look at the whole system and start breaking it into parts called modules. Keep breaking these modules until they can't be broken anymore. This process, known as 'modularization', keeps the algorithm unchanged.
- This method helps solve big problems by dividing them into small, independent parts and then repeating the modularization process. It's a great way to create software from scratch when you don't know the specific details.

WHAT'S A MODULARIZATION PROCESS?

Finding the 5th Fibonacci using top-down approach.



HOW THE TOP-DOWN APPROACH WORKS?

1. Define a clear and measurable main objective or problem.
2. Modularize by breaking it into sub-modules.
3. Address each sub-goal through modularization, minimizing them for better manageability.
4. Iterate steps 2 and 3 until the overall objective or problem is resolved.

APPLY THE TOP-DOWN APPROACH TO THE ASSIGNMENT

- Researching the top-down approach for this assignment reveals a major goal. Challenges within the program are smaller modules of a larger objective. To make it feasible and measurable, we break these down into smaller, manageable units.
- For this topic, we've divided it into three modules:
  - Apply the top-down approach to the assignment ---> How it works ---> Learn about the top-down approach.

THANK YOU