

SECTION 6: METHODS AND FUNCTIONS, 2 hours 54 mins, 30 parts

• 22/29 Function Practice Exercises - Solutions

- -> this is the solution to the question from the previous video
- -> we're first checking if both numbers are even -> there is an if `a % 2 == 0` and `b % 2 == 0`:
 - **this comes up a lot in questions, the condition for an even number is `a % 2 == 0`**
 - -> so we are saying -> if both the numbers are even - do this
 - -> else - do this
- -> and nesting the if statements
 - -> a lot of it is thinking about the different cases for what the inputs to the functions would be
 - -> writing the function
 - -> then testing the function with different possible inputs, and cleaning up the code
 - -> she's replacing sections of code with a min function (with an entire function) - rather than repeating sections of the code
 - -> she's also written return in the code -> rather than storing the result then returning it at the end
 - -> the efficiency of solutions (in as few lines as possible while it still being understandable)
- -> another question
 - -> takes a two word string and returns True if they begin with the same letter
 - -> **build out the logic and then make it (the solution) more compact**
 - -> we take the two input words and split them -> `text.split()`
 - -> then return `the_first[0] == the_second[0]`
 - -> **she's also thinking about the different possible inputs to the function (e.g if a character is lowercase or uppercase), and we are also assuming the input has a certain datatype**
- -> another question
 - -> true if one of the numbers is 20, or if both of them sum to 20
 - -> **we have a set of conditions in the question, and then in the solution we are converting the conditions into code (like in maths when you convert the text in the question into simultaneous equations -> we are coding the problem)**
 - -> once we have coded the problem -> then she is making the solution more compact / concise -> `return (...) or (...) or (...)` <- we are checking for three different boolean conditions
 - you can have ultra compact code or the same thing over a lot of separate if etc else conditions