Fun Facts about Functions with Mr C

ESC101: Fundamentals of Computing

Purushottam Kar

Announcements

- Last date for dropping Advanced Track October 12
  - Application must be an email to instructor, mentors, teammates
- Last date for dropping ESC101 course October 12
  - Application must be on standard DoAA course drop form – no email!
- Joint tutorial for B1 and B14 on October 12
  - 12 – 1 PM (same time), L19 - just an arrangement for this week ☺

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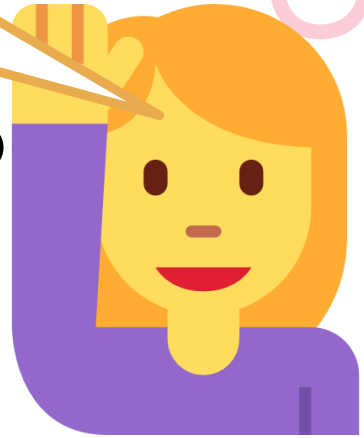

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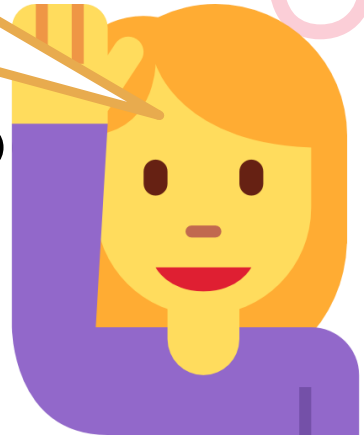

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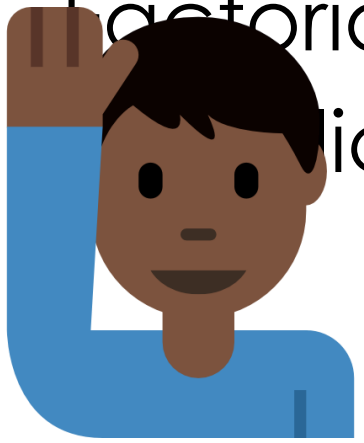

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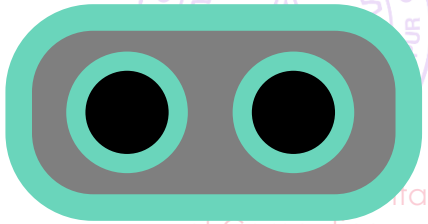

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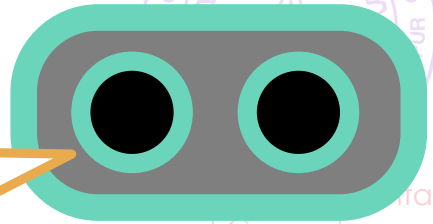
I too allow you to write your own functions for your comfort and to make your code easier to read and easier to debug!



The Anatomy of a C Function

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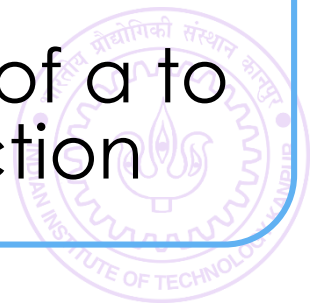

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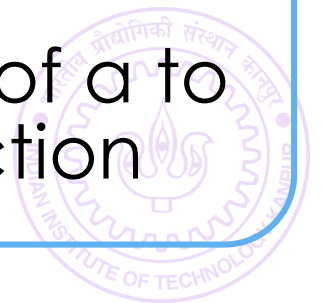

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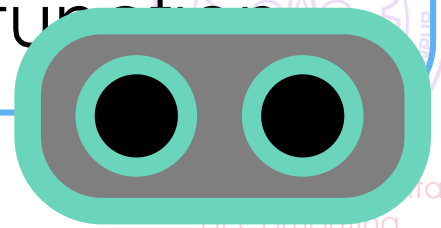

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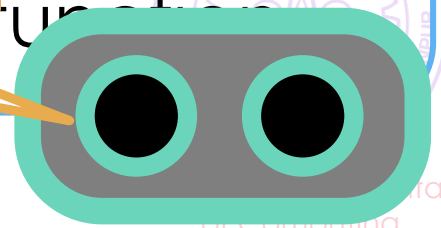

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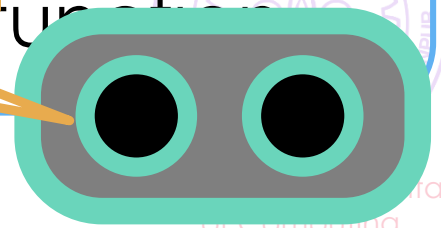

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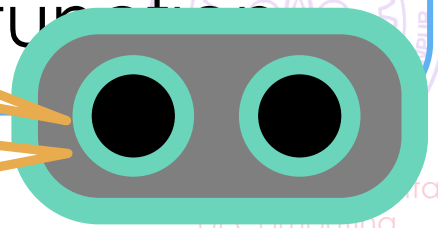

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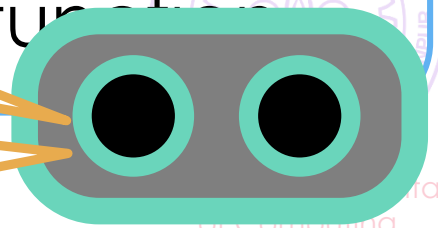

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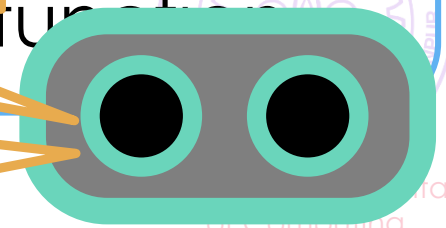

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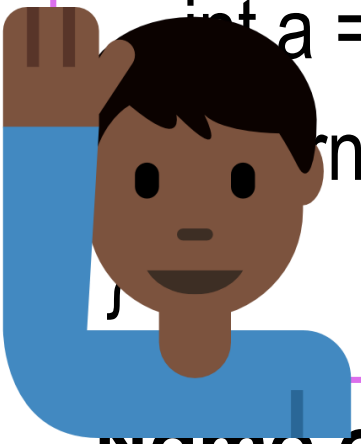

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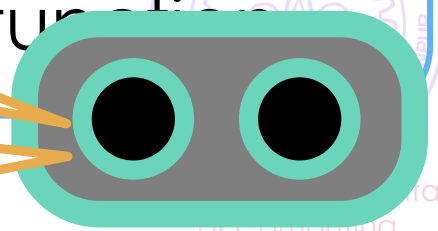

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We will teach you 3 ways to return more than one output in this course ☺

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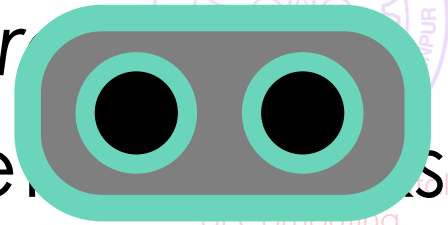

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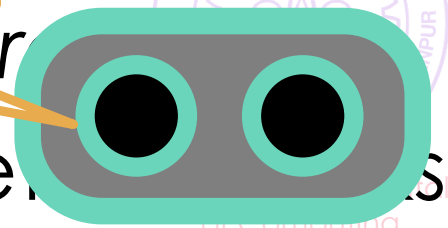
You must define the function **before** using the function (within main or your own functions)



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Define a function to input two integers and print Hello World if their max is prime

Some Functional Exercises

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Define a function to input a character, output its upper case version if lower case else output the character itself

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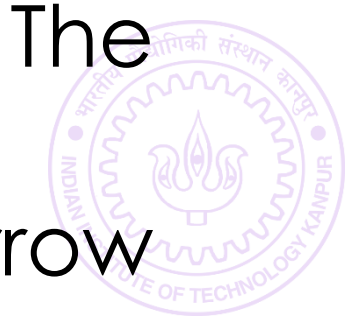
Will see more about this "cloning" behaviour tomorrow



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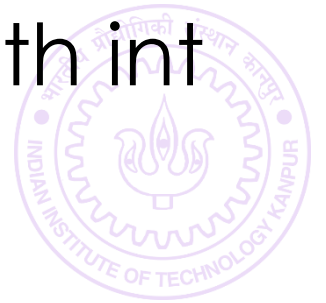

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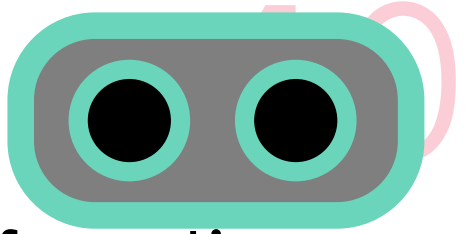

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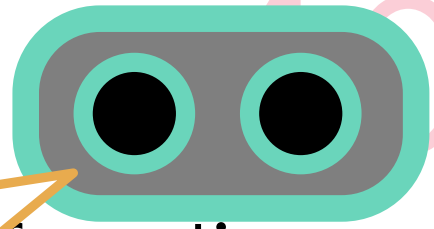
For functions that do not need to return anything i.e. void return type, you can either say return; or else not write return at all inside the function body in which case the entire body will get executed



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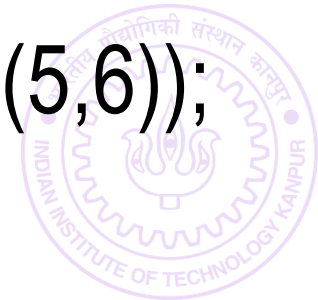

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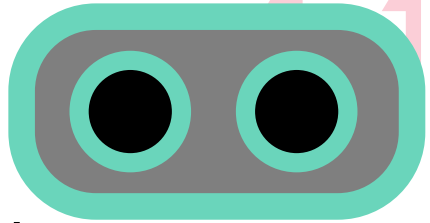

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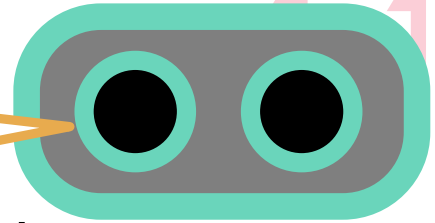

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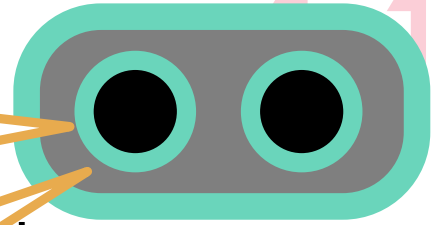

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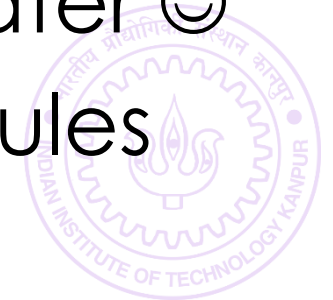

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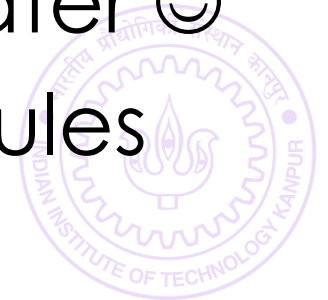

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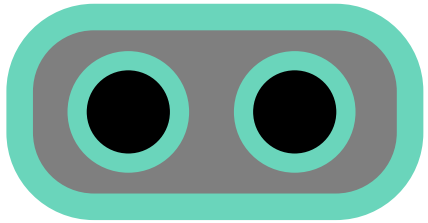

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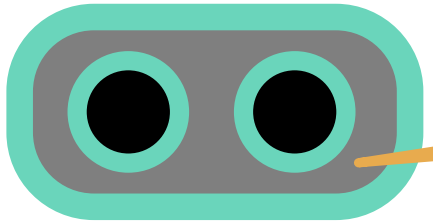

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Writing code that has modules is a type of *modular programming* – it is the the industry standard!

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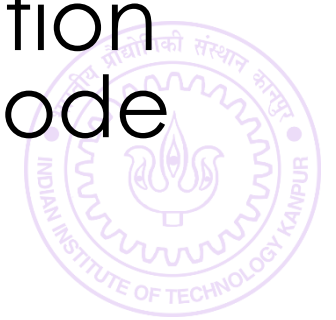
Rest of code need not be touched, only faulty function needs to be fixed – again the industry standard of code maintenance.



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We reused code in today's codes – didn't have to rewrite code – may make mistakes if you write same code again