Course introduction COMS20010 2021, Video lecture 1-1

John Lapinskas, University of Bristol

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- One day you might need to understand how these algorithms work.
- One day you might need to come up with your own algorithms. (Much more likely than the above two!)



God I wish there was an easier way to do this

```
private bool IsEven(int number){
   if (number == 1) return false;
   else if (number == 2) return true;
   else if (number == 3) return false;
   else if (number == 4) return true;
   else if (number == 5) return false;
   else if (number == 6) return true;
   else if (number == 7) return false:
   else if (number == 8) return true;
   else if (number == 9) return false;
   else if (number == 10) return true;
   else if (number == 11) return false:
   else if (number == 12) return true:
   else if (number == 13) return false;
   else if (number == 14) return true;
   else if (number == 15) return false;
   else if (number == 16) return true:
   else if (number == 17) return false;
   else if (number == 18) return true;
   else if (number == 19) return false;
   else if (number == 20) return true:
   else if (number == 21) return false:
   else if (number == 22) return true:
```



Kat Maddox @ctrlshifti · 30 Jul Replying to @ctrlshifti

I figured it out! Thanks everyone

```
private bool IsEven(int number)
{
    string numberString = number.ToString();
    string lastChar = numberString.Substring(numberString.Length - 1);

    if (lastChar == '0' || lastChar == '2' || lastChar == '4' ||
    lastChar == '6' || lastChar == '8')
    {
        return true;
    }

    return false;
}
```



Kat Maddox @ctrlshifti · 30 Jul Why are people talking about %?

I'm trying to determine parity not get percentages

1.5K







19K

11.8K



329

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- One day you might need to understand how these algorithms work.
- One day you might need to come up with your own algorithms.
 (Much more likely than the above two!)
- One day you might have to go through a job interview...

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- 90% from the final exam.
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More good news: The quizzes are free marks!

Blackboard quizzes

These are auto-marked questions worth 10% of your final grade:

- One per week, due at noon on Mondays. (Including next week!)
- They should take roughly 1 hour each, but no time limit.
- You can start a quiz and then finish it later.
- Collaboration, online resources etc. are all fine. Study together!
- The usual late policy for coursework applies, so don't miss the deadline or you'll lose a lot of marks very quickly.

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After a quiz, you get immediate answers and feedback. Don't abuse this. They're important exam prep, so you'd only be cheating yourselves...

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- Quiz due date and problem sheet release: Monday, week n + 1.
- In-person problem class: 90 minutes Friday mornings, week n + 1.
 - These will be half-lab, half-lecture, all-important.
 - You don't have to do the sheet first! (See unit page...)
 - You do have to have tried your best to understand the week's material.
- Problem sheet answers release: End of Friday, week n + 1.

Planning your time

During term, aim to spend about **7 hours per week** on this unit:

- 2 hours watching the week's lecture videos.
- 2.5 hours *understanding* the week's lecture videos. This could, but doesn't have to, include:
 - Attending the one-hour Q&A session;
 - Asking questions on the unit Team;
 - Reading textbooks and other sources;
 - Working together with other students;
 - Trying the problem sheet.
- 1 hour finishing the week's Blackboard quiz.
- 1.5 hours attending the week's problem class.

Further details about unit organisation are on the unit page.

Useful references

Proofs on slides are hard, so I provide recommended readings each week on the unit page as an alternative source.

These are all available **as free eBooks** from the university library at https://www.bristol.ac.uk/library/. The most common three will be:

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- The Algorithm Design Manual (Skiena)
 - For engineers, by an engineer.
 - The least technical option great if you're having trouble with proofs.

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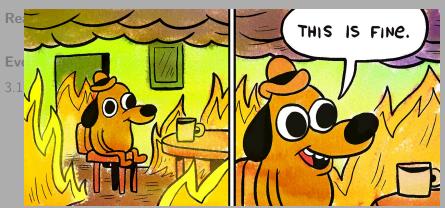
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This is a pretty neutral comparison site.

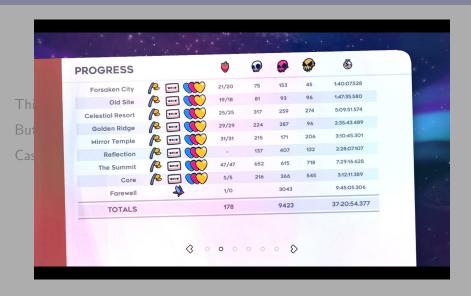
Mindset for the unit

This unit is hard, because solving problems is hard.

But like most things, you get much better at it with practice.

Case in point...

Mindset for the unit



John Lapinskas Video 1-1 9/9

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Case in point...

So keep at it, and climb the mountain. ;-)