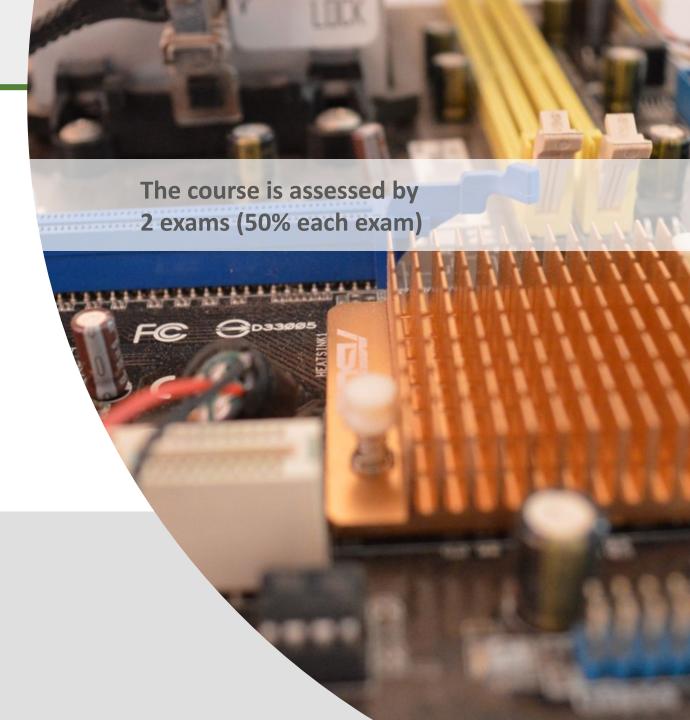
Computer Science Transition workbook

- The topic of **Computer Science** is at the heart of the modern world
- Studying it can make you extremely sought after in todays job market
- The transition from GCSE to A level is significant, this includes:
 - An increased emphasis on **technical content**
 - An increased emphasis **independent work**



Why did you choose Computer Science?

Expected time to complete: 1/2 hour

In this simple task you get the opportunity to tell me your choices and reasons behind choosing to study Computer Science. Please answer all questions as best you can.
1. Why did you choose to study A level Computer Science?
2. What other courses have you chosen to study at Key Stage 5, and what made you choose this combination?
3. What are you hoping to achieve from studying Computer Science?
4. How would you describe yourself as a learner at GCSE? What skills where you good at, what areas would you like to improve on?
5. What are your other hobbies and interests outside of school? Anything related to Computing?



LOG IN SIGN UP Search

<u>Students</u> <u>Topics</u> <u>Events</u> <u>Help and support</u>

A level Computer Science learning

Welcome to Isaac Computer Science, the free online platform for students and teachers.

- Use it in the classroom
- Use it for homework
- Use it for revision

We also offer free <u>teacher CPD events</u> and <u>student workshops</u>. Isaac Computer Science is proud to be part of the Department for Education's <u>National Centre for Computing Education</u>.

Sign up

Log in



STEP 1:

Click on the image for the link to Isaac Computer Science.
Sign up to create an account

Option 2: Share code

Ask your students to enter the following code into the Teacher Connections tab on their 'My account' page:

TT9LAK

STEP 2:

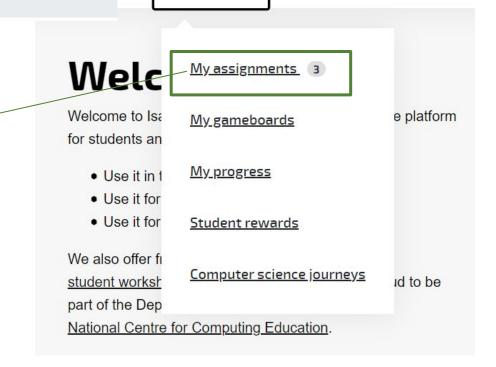
Students 3

Connect with my class

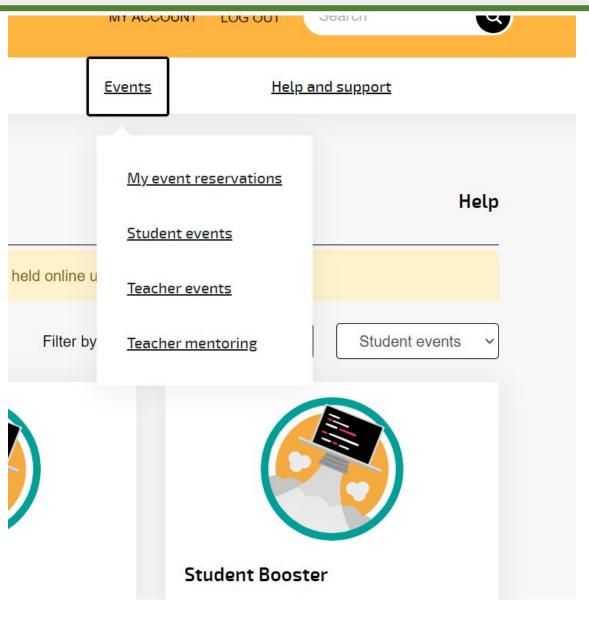
Teachers

STEP 3:

Go to my assignments. There are 5 gameboards for you to complete on some key topics. You can use the hints to help.

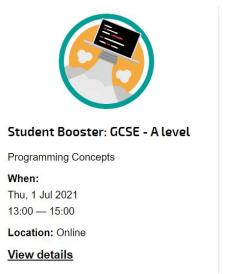


Theory Transition topics



Booster Events

If you fancy some online sessions you can book onto GCSE to A level Booster Events in early July. Go to events and take a look. Make sure you book onto GCSE transition ones not full A level.





Student Booster: GCSE - A level

Networking

When:

Fri, 2 Jul 2021 9:30 — 11:00

Location: Online

View details



Student Booster: GCSE - A level

Functions of the processor

When:

Fri, 9 Jul 2021 11:00 — 12:00

Location: Online

View details

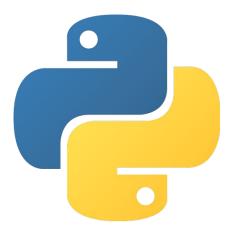
The basics of programming tasks

Programming basics

Learning to "code" is a fun and essential part of A Level Computer Science. This task is ideal if you haven't done the GCSE in Computer Science or you simply want a nice refresher ahead of starting your A Level course.

- 1. Head over to the web site: https://www.learnpython.org/
- 2. Complete the following python tutorials under the heading:
 - Hello, World!
 - Variables and Types
 - Lists
 - Basic Operators
 - String Formatting
 - Basic String Operations
 - Conditions
 - Loops
 - Functions
- 3. Each section presents you with theory, code to run and exercises to try out.
- 4. If you want to practice writing your own python programs you can download and install a simple python development tool here: https://www.python.org/downloads/

Expected time to complete: 6 hours



Additional note:

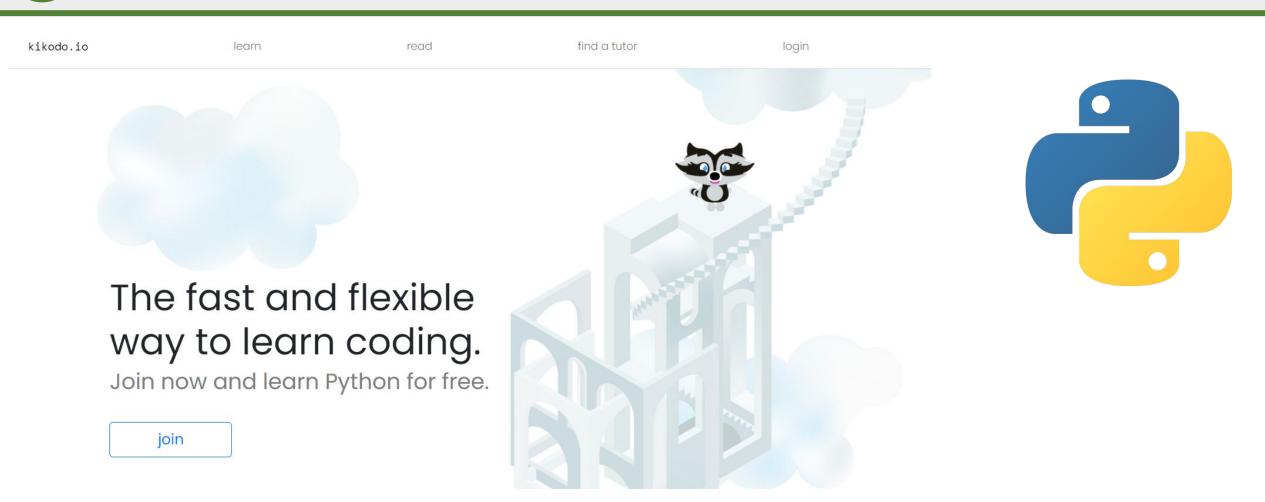
This task is most suited to students who intend to do the A Level and have not previously gained much / or any programming experience from the GCSE Computer Science course.

Although the language chosen here is Python, and that may not be what you will be using at A Level, it is the underlying programming concepts which are important.

The list of topics above cover the standard set of programming concepts you would be expected to know having completed a GCSE and Computer Science and so will prepare you well for the A level.

3

The basics of programming tasks



Programming is an important part of A level. Sign up to kikodo.io and follow the Python learning Pathway. There is a lot in the course so jump around the sections if you are confident with that skill



See you in September