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| **Core Knowledge Map** |
| Subject: Computer Science | Year: 8 | Term: 1.0 |
| What are we learning? |
| How to stay safe onlineHow to use text-based programming with Python |
| How will I be assessed  |
| There will be a checklist of things you have learned for you to fill in. You will create an ‘evidence presentation’ showing the work you have done in Python |
| Big questions: |
| What is a programming language?Why do we need high level languages and what is machine code?What are the main concepts of programming |
| How does this build on previous learning? | How will this link to my future learning? |
| This builds on the introductory programming languages like Kodu and Scratch, to a fully text-based language. | The text based language is the fundamental building block of computer science, and this introduction will link you to coding practice throughout your Computer Science education |
| Core knowledge: | Key vocabulary: |
| How to open the Python IDE (IDLE)* Creating a new Python file
* Running a program
* “Hello World!”

How to input and output using Python code* print()
* input()

How to put commands in the correct order* Sequencing

How to use loops to repeat tasks* For and while loops
* Fixed and conditional loops

How to make choices within your code* ‘if’ statements to compare data
 | print()SequencingIterationSelectionVariableConstantProcessProcedureFunctionLoop/repeatChoiceIfWhileElseForelif |
| Need more help? |
| 1. [Welcome to Python.org](https://www.python.org/)
2. [Introduction to Python (w3schools.com)](https://www.w3schools.com/python/python_intro.asp)
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