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| **Core Knowledge Map** | | | |
| Subject: Computer Science | Year: 9 | | Term: 2.0 |
| What are we learning? | | | |
| How to create more complex code in Python  What the main structures of programs are | | | |
| How will I be assessed | | | |
| There will be a checklist of things you have done, and a Word or PowerPoint document showing screenshots of your Python code and the output it generates. | | | |
| Big questions: | | | |
| What are the key concepts of programming a computer?  How are programs constructed to work efficiently? | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| This will build on previous knowledge from the Introduction to Python topic | | The programming skills from this topic are the basis for all computer coding, and will be useful for GCSE and beyond | |
| Core knowledge: | | Key vocabulary: | |
| That the 3 main concepts for programming are:  Sequencing   * Carefully choosing the order for commands to be given in…   Iteration   * Loops using either:   + for i in range(0,10,2):   + while i<=10: * the difference between fixed and conditional loops   Selection   * using ‘if’ statements to compare variables and choose different outcomes   Using procedures and functions to control code order | | Sequence  Iteration/loop  Selection/if  Else  Elif  Def  Procedure  Function  IDE | |
| Need more help? | | | |
| 1. [Welcome to Python.org](https://www.python.org/) 2. [Python Tutorial (w3schools.com)](https://www.w3schools.com/python/) | | | |