## **Year 11 Computer Science Additional Homework Tasks**

All **tasks** should be **evidenced** by screen snipping, or uploading to your OneNote exercise book (into the Homework section) or directly into your class theory exercise book.



- 1. Complete an activity from the **Starters section** of your OneNote exercise books try out a Python **Starter Challenge!** Screen snip the evidence
- 2. Search for and watch the video, OCR GCSE SLR1.8 Legislation relevant to Computer Science at https://student.craigndave.org
  - Make notes on legislation relevant to Computer Science
- 3. Test your knowledge of Python's Strings:
  - https://hourofpython.trinket.io/python-challenges#/string-challenges/lowercasechallenge
  - https://hourofpython.trinket.io/python-challenges#/string-challenges/uppercasechallenge
  - https://hourofpython.trinket.io/python-challenges#/string-challenges/number-of-thingschallenge
- 4. **Research Task**: Carry out some research to find out the **impact of e-waste** on developing countries.
  - Prepare a summary report to outline the main problems associated with the disposal of old digital equipment.
  - Outline any legislation that has been put in place to try and help prevent the illegal dumping of e-waste
- 5. Search for and watch the video, *OCR GCSE SLR2.2 The use of arrays* at https://student.craigndave.org
  - Make a one-sided revision sheet to share in class
- 6. An online store gives a discount of 15% for purchases of £200 and over, up to a total discount of £350. Write an algorithm, in **pseudocode**, that would allow a user to calculate the **discount.** You can refer to your Edexcel pseudocode help sheet
- 7. Complete a programming task at <a href="https://snakify.org/en/">https://snakify.org/en/</a>
  - Make notes to explain any new syntax you have used
- 8. What is the **Digital Divide**? What **factors** are considered to contribute to the digital divide in the **UK**?
  - What factors are considered to contribute in a **LEDC**?
- 9. Create a **one-page handout** for your class to explain the difference between **compilers** and **translators**.
  - Try to think of a suitable *analogy* or *mnemonic* to help students remember the difference
- 10. Search for and watch the video, OCR GCSE SLR2.2 The use of records to store data at https://student.craigndave.org
  - Make a one-sided revision sheet to share in class