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The Ashcombe 6th Form
Y11 into Y12 – #OneStepAhead

Computer Science Introductory Summer Brief

Task 1 – Let's code

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 if 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. **Write your own python program to show off your skills.**
   You can download and install a simple python development tool here: https://www.python.org/downloads/

Task 2 – Emerging Trends

In this task you get to investigate any area of emerging computer technology which interests you.

You can pick any area which interests you, but examples could be:

- **Artificial intelligence**
- **Robotics**
- **Automated self-driving cars**
- **Quantum computing**

In no more than ONE side of A4 summarise the area you have chosen under the following four headings:

1. **What is it?**
2. **What are the possible Social, Moral, Cultural and Ethical benefits of this technology on society**
3. **What are the possible Social, Moral, Cultural and Ethical risks of this technology on society**
4. **My conclusion on this technology and what it will mean for our world 10 years from now**

AQA: SLR 19: Moral, social, legal, cultural issues
https://student.craigndave.org/videos/slr19-moral-social-legal-cultural-issues