**Work for year 7 & 8:**

Please complete the following tasks on paper – you may use the internet to help you.

Find the definitions for the following computer programming key terms:

|  |  |
| --- | --- |
| Key word/term | Definition |
| Syntax |  |
| Variables (programming) |  |
| Data types:   * String * Integer * Float |  |
| Concatenation |  |
| An array |  |
| Validation |  |
| Function |  |

**Planning**:

Planning anything before you do it is essential and before you create a computer program is no different. Please answer the questions below:

* Why is planning so important?
  + What would happen if something is missed off the plan?
  + How could errors be avoided?
  + Why is communication so important with the customer/client of the program?
* Is the person/team that plan a computer program the same people who would create it? (Think about buildings)
  + Can you find out about the different people involved in creating a computer program.
* What are the methods/ways that you could use to plan for a computer program?
* What are the stages of the System Lifecycle model?
  + What happens at each stage?

**Security**:

Security is vital/important for any big company that has an online presence – that is going to be any company really.

Sony PlayStation was hacked into, research into the following please:

* **What happened? When?**
* **How did they hack the system?**
* **Who was it? Did anyone get caught?**
* **How long was the network down?**
* **How many people did it effect?**
* **What happened to Sony?**
  + **Fine?**
  + **Bans?**
  + **Criminal proceedings?**
  + **Reputation?**

**Laws:**

There are few laws that we all need to consider when using the internet, I would like you to focus on these 2 below please:

* **Data Protection Act 1998**
* **Computer Misuse Act 1990**

Task(s):

* Research and find out the key elements of each law
* If you break one of the laws what are the consequences?
* Are these laws just in the UK or Worldwide?

Can you find put your findings into 2 different Mind Maps please