**Reading (VIPERS FORM)**

Use this form to record key ideas from reading to prepare for the lessons.  make sure you upload the completed form in TEAMS (Reading section)

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| Topic you prepared: | Links used: |
| Validation and verification | [Validation and verification — Isaac Computer Science](https://isaaccomputerscience.org/concepts/soft_design_validation_verification?examBoard=all&stage=a_level) |

Terms: Write any new technical term and their meaning, add more rows if needed.

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| **Terms** | **Meaning** |
| Data accuracy | A term used to describe how valid/invalid the data is. (trustworthiness) |
| Data type check | Checks that the value entered is of the required data type. |
| Range check | Checks that the data is between an upper limit and a lower limit. |
| Limit check | Used to check either the upper limit or the lower limit. |
| Length check | Checks that a specific number of characters or digits has been entered. |
| Format check | Used to check that the data is in a specified format. Regular expressions can be useful here to match a string against a pattern. |
| Presence check | Checks that something has been entered into a field, and the field has not been left blank. |
| Existence check | Used to check that a piece of data or the name of a file actually exists. |
| Uniqueness check | Checks that a value entered is a new and original value. |
| Consistency check | Checks that pieces of data from two or more fields are compatible with each other. |
| Check digit | A digit that helps confirm that a code is correct. |
| Visual check | A person checks that the data being entered from one document into another is the same |
| Double entry | Requires a user to input the same information twice and compares the 2 values |

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| **What can we understand from the topic?** |
| There are range of techniques that can be used to reject obvious errors in a program that would be unacceptable. |

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| **How this topic linked to other previous topics ? What conclusions can we draw from this topic?** |
| Programming can be checked to ensure it makes sense to remove errors and bugs involed. |

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| **What are the strengths / applications of this topic? (e.g. accuracy, steps of calculations, time or space complexity, used when …., hardware and software needs, ethical or legal issues, ….etc.)** |
| Extremely important as without sensible a program can be exploited and not work as intended so to prevent this the many types of validation can be used |

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| **What are the limitations / drawbacks of this this topic (e.g. problems, limited accuracy, too many steps, too complex, cannot be used when, hardware requirements, ethical and legal issues, ….. etc.)** |
| No limitations in my opinion |

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| **Write a summary of the topic in 50 words** |
| Validation can be used into many programs which makes the program as accurate as possible which makes the program more refined furthermore, |