



Bishop Vesey's Grammar School

Computing Department

Summer Work

1. Cambridge MOOC

- a. Complete the following sections on Data Representation: 31 to 38
<http://www.cambridgecsecomputing.org/representation-of-data-in-computer-systems-main>
- b. Complete the following sections on programming: 58, 59, 60, 61, 64, 65, 68, 69
<http://www.cambridgecsecomputing.org/programming-main>

2. Install the following software on your home computer/laptop

- a. <http://www.bluej.org/>

3. Watch these videos and carry them out in BlueJ

- a. <https://www.youtube.com/watch?v=UMcijMC4Dwk>
- b. <https://www.youtube.com/watch?v=Zm2rY8C83f4>

4. Complete the following exercise

(Email your answers to k.kirk@bishopveseys.bham.sch.uk)

- a. Convert the value 13 to binary.
- b. Convert the value 82 to binary.
- c. Convert the value 82 to hexadecimal.
- d. Convert 10110101 from binary to decimal.
- e. Add the binary numbers 0101 and 0110 together. Give your answer in binary.
- f. What letter does the following ASCII code represent: 01010001?
- g. How many colours can an image with a 3 bit colour depth display?
- h. What is the term for creating a variable?
- i. What is the name for a stored value that is fixed?
- j. What is a logic error?

5. There will be a **test** on Data Representation week commencing 09th September 2019

Work must be completed and submitted by email **before** Wednesday 6th September 2019