**Keelan Matthews – Practical 1**

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**Task 1**

1. a – stack – it is created **at** run time

b – heap – it is assigned memory **during** runtime (pointer)

c[10] – stack – it is created at runtime

d – stack – it is created at runtime

e – heap - it is assigned memory **during** runtime (pointer)

f – heap - it is assigned memory **during** runtime (pointer)

g – stack – it is created at runtime

h – stack – it is created at runtime

n – stack – it is created at runtime

1. It would not work as h is a constant variable and cannot be changed later. Assigning it NULL renders it useless.
2. - g is a char type variable, but is being assigned an integer value

* The void data type does not have a return value but is being used as a variable to hold a value.
* e pointer is being referenced and dereferenced incorrectly.

**Task 2**

1. Before the constructor of the derived class.
2. After the destructor of the derived class.
3. After
4. Class A -> Class B -> Class D
5. Class D -> Class B -> Class A

**Task 3**

1. See code
2. This worked because division was performed between two integer types.
3. This worked because addition was performed between two floating point types.
4. This did not work because the provided class only accepts 2 arguments whereas the question asks for the addition of 3.
5. This did not work because it is not possible to multiple string data types without overloading the \*.

**Task 4**