Complete these activities to the best of your abilities without using the internet or your computers. You will not be graded on correctness of your answers or on syntactic correctness. This exercise is to see where your c++ memory is.

1   C++ & Objects Questions

1. What is an object?

2. What is a struct? How are objects and structs different from one another?

3. Define a struct `Node` to be used in a linked list.

4. When we are writing programs in c++, what purpose does a header file serve?

5. What is the difference between the following two variable declarations? `int x = 2;` and `int &y = x;`

6. What are the differences between the `main` definitions `int main()` and `int main(int argc, char* argv[])`?

7. Why do you think that these two ways to define `main` exist?

8. What type does the `main` function return?

9. What value do you think that the `main` function returns if you forget a `return` statement? What does this value mean?

10. Recall that `cout` in the `iostream` library is used to print text to standard out. Write a c++ hello world program.