1. Write a brief history of the UML, and prepare a presentation on the subject.

UML was fully developed in 1996 by a group of developers at Rational Software. The developers had all worked with emerging object- oriented software and were even assisted by Ivar Jacobson, creator of the object-oriented software engineering method when he joined in 1995. The purpose of UML was to create a standard for object-oriented languages in order to unify them, although the standards have been considered inconsistent and ambiguous. It has been revised many times, but it is considered to be too large of a language to actually learn and have consistency.

1. Contact the IT staff at your school or at a local business to learn they use object-oriented programming languages. If so, determine what languages and versions are used, how long they have been in use, and why they were selected.

Some of the files in Cummins that are used in data analytics and financial reports are created using Python. Python comes in handy because it is easy to extract and manipulate data. They also use quite a bit of JavaScript on their website to have more control over the graphics

1. Perform a web search for the exact phrase “object-oriented systems analysis”. How many hits did you get? Provide three examples.

This search on google provided an estimated 2, 410, 000 results in less than half a second. One example is medium.com’s “Object-Oriented Analysis and Design- Introduction (Part 1)” [https://medium.com/omarelgabrys-blog/object-oriented-analysis-and-design-introduction-part-1-a93b0ca69d36 ] ; another is a Wikipedia page with a very detailed entry on object-oriented analysis and design ; the third I chose is dl.acm.org ‘s Object-oriented systems analysis: a model-driven approach book written in 1991.

1. Prepare a report on at least three CASE tools that provide UML support.

There are many CASE tools with UML support to choose from. I found Sparx Enterprise Architect, Umbrello UML Modeller, Argo/UML are all free to use products. NetBeams IDE also supports UML as does Visio.

1. Investigate business process modeling languages, such as BPEL.

One such business process model language is BPQL, which is short for Business Process Query Language. BPQL was developed as a means to standardize a query language that manages e-business processes in a similar way that SQL does for database management systems. BPQL is aimed at Business Processing Management. The first BPQL draft was made available in 2001. It was later merged with BPM (Business Process Management) which added more features and refined the process.