Computer based technology is so widely used and complex that it can sometimes be difficult to discern between what one field or career does that another does not. Computer science is somewhat of an umbrella term for a large number of fields that deal with applying science and technology in ways that are concerned with processing information using computers. In the same vein, though each with their own differences, are software engineering and information technology. Software engineering is perhaps the most easily separated from the other two: applying a systematic, quantifiable approach to developing, operating, and maintaining software. Information technology is more closely related to the definition of computer science in that it is the development, maintenance, and use of technology to acquire, process, store, and distribute information. Computer science is perhaps the most importation concept, as it is an integral part to essentially every field. Web developers utilize computer science in envisioning the needs and design of their or a client's website, creating and testing applications, and can also be tasked with monitoring web traffic as part of their analysis of a site's performance. Information security is a constantly evolving field that handles planning and implementing security measures to protect computer networks and systems from cyberattack. Security analysts engage in computer science through planning for security breaches, testing and simulating attacks to find vulnerabilities in their systems, monitoring networks, and investigating potential breaches. It is a field that must always stay up to date on the latest technologies and methods of attack. Storage and organization of data such as financial information or customer shipping records are often managed by database administrators. Such administrators use computer science in ensuring that this data is secured and that the databases it is contained in are operating efficiently and structured in an optimal way, determining the needs of whoever will be using the databases, such as allowing data analysts to more easily find the information they need. The field of computer science I find myself drawn to is software development, which I used to believe fell under the canopy of computer programming and now understand is its own entity. While one of my favorite hobbies is programming, I believe I would find myself far happier in a career designing and planning the code that needs to be written rather than being the one writing it because I would have actual creative freedom to solve problems. Being both a big picture and a detail-oriented person, the fact that software development can be a lot of ensuring many moving parts function properly together is something I believe I would like. I also enjoy working with a team when we are all contributing in equal amounts and are passionate about the project, a scenario I imagine I would experience in software development. This is why knowing the differences between fields is important. It is understandable that from an outside perspective, the many areas and variations of computer science can seem as though they are all the same. Many, however, have unique combinations of responsibility and purpose that set them apart. Every individual field has a reason to exist.

At the start of writing the report, I created an outline to separate the several sections of importance and their subsequent requirements for the purpose of more easily working on individual parts. Utilizing the resources provided on the assignment page, I took definitions and descriptions for the various areas of computer science and rewrote them in my own terms so that they would be less technical and easier to understand. I then tied these definitions together as part of the introduction so that they were related to each other in an informative way. I produced the conclusion by altering and restating my introduction as a reminder of what the report is meant to convey. I contemplated my interests and past experiences to determine the field of computer science I believe I am most keen on and used parts of its description to include an explanation of it and evaluate my reasoning. From there, I looked over a number of the computer science fields and determined which ones I wanted to include - mostly based on how interesting or complex they seemed – and briefly paraphrased their responsibilities, considering what the most important and unique details were and evaluating my wording to ensure simplicity. Having each piece of the report separated made it easier for me to make review passes over each of them, ensuring that they were ready to be put together as a whole.