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Icebreaker:

- **We both went to the same high school**

- We both are doing a major in computer science

- **We both have iPhones**

- We both have the same water bottles

- **We both like Biryani**

Learning Expectations:

- Get a good understanding of the programming language C:
    - This topic is relevant to both of us because C is an important foundational procedural programming language with important real-world applications, such as creating and managing databases and operating systems. These are fields both me and my lab partner would love to explore and thus getting a good grasp of C would enhance our understanding of these fields.
- Understand the fundamentals of the core concepts of the class such as some data structures and pointers:
    - This class is foundational to understanding the fundamental concepts of programming since it goes through concepts deeply embedded in the software world. An example of this is the utilization of pointers which can store the memory addresses of variables. We believe that this class will take us
- Become more efficient in optimizing the performances of the programs we create both inside and outside of class (such as personal projects):
    - Both me and my lab partner would love to start creating more personal projects in the upcoming months. Having a good understanding of the concepts covered in

this class will help us create projects that have a better application to the real world.

- Enhance our skills when it comes to collaborating with our peers
  - Working with other people is one of the most valuable skills in the real world. Collaboration in the field of computer science guides a person to become better and better in this skill and hence and my lab partner believe that through our lab work and other collaboration opportunities in the class, we will enhance our skill of collaboration.

Programming in C vs C++:

- C is a procedural programming language while C++ supports both procedural and object-oriented programming.
  - This affects real-world applications since in this specific difference, C++ would provide more versatility since it provides the opportunity with object-oriented programming on top of procedural programming which is the only thing C provides
- C is a more efficient language compared to C++:
  - Although both these languages are set to be efficient, C in particular is generally a faster programming language and has a shorter runtime which allows it to be a more efficient programming language for operating systems
- C and C++ have different input/output methods:
  - C uses scanf() and printf() to get user input and display output.
  - C++ uses std::cin>> and std::cout<< for getting input and displaying output
- C and C++ use different approaches to compiling code:
  - C uses top-down processing while C++ compiles from bottom to top