**Cohort Name**

The Byte-les.

**Cohort Description**

If the Beatles took a Digital Logic class. We’re four members, so the name seemed appropriate and fun in that regard.

**List of cohort members**

David Leung, John Jacobs, Vranda Vijay, Jafar Ali

**If using source repository, identify service**

Google Drive

**Main form of digital communication**

Discord

**Description of project**

For our project, we will be making a processing system capable of performing mathematical operations, storing the results in memory, and operating on the results. The system will contain a combinatorial logic circuit (ALU) featuring a suite of mathematical and logical operators at the user’s disposal. Given an opcode and a 16-bit input, the system will perform the operation and store the result in a 32-bit register to accommodate multiplication of two 16-bit numbers. The value of the register can either be returned to the user or have the lower 16-bits used as an input in a subsequent operation. This system will be capable of implementing numerous mathematical formulas. For example, we will implement different geometric formulas like area of triangle, surface area of a sphere, etc.