THIS IS A PROCTORED PRACTICAL

YOU MUST SHARE YOUR SCREEN SO YOUR PARTICIPATION IN THIS PRACTICAL CAN FULLY INVIGILATED

1. Create a Github repository "Assembly\_and\_C"
2. Create a sub directory PRACTICAL\_01
3. Add Github link to CA Spreadsheet   
   e.g <https://STUDENTID.github.com/Assembly_and_c/PRACTICAL_01>
4. Invite Lab Supervisors including MakeMuddyGames as a collaborators
5. Go to designated group to complete practical
6. Upload completed Practical files to Github repository

NOTE: Use of EASy68K editor and emulator allowed, use of internet allowed, use of slide deck(s) allowed. Installer located here <http://www.easy68k.com/>

Create a unique file ***e.g. part1.X68*** for each practical section below.

**Objective** Understand and utilise Basic Memory concepts, BINARY, HEX and Literals**:**

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| 1 | Create a new 68K project and name the file ***part1.logicly***  Create the following circuit using logic.ly | Store the following Decimal Values as Binary (Bits LSB to MSB)  0 to 15 |
|  |  | |
| 2 | Create a new 68K project and name the file ***part2.X68***  Edit compile and execute the code across, examine and note contents of data registers and memory. Identify the memory location of $3000 and its contents. | MOVE.L #%00001111,D1  MOVE.B D1,D2  MOVE.B D1,$2000  MOVE.B $2000,D2  MOVE.B $2000,$3000 |
| 3 | Create a new 68K project and name the file ***part3.X68***  Edit compile and execute the code across and observe the output. | ORG $1000  START:  MOVE.B #$64,D1  LEA text, A1  MOVE #14,D0  TRAP #15  MOVE #3,D0  TRAP #15    SIMHALT  text dc.b 'Data Register: ',0  END START |
| 4 | Create a new 68K project and name the file ***part4.X68***  Edit compile and execute the code across and observe the input and output. | |
| ORG $1000  START:  LEA text, A1  MOVE #4,D0  TRAP #15  MOVE #14,D0  TRAP #15  MOVE #3,D0  TRAP #15    SIMHALT  text dc.b 'Data Register: ',0  END START | | |

**Demonstrate completed assembly files at the end of the LAB and ensure it has been checked**

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| **Student Name** | **Karolis Grigaliunas** | **Student Number** | **C00287940** |
| **Date** | **15/01/24** | **Checked** |  |