#### **Practical 01**

### **Assembly Language**

#### 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 <a href="http://www.easy68k.com/">http://www.easy68k.com/</a>

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

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

1	Create a new 68K project and name the file <i>part1.logicly</i>	Store the following Decimal Values as				
	Create the following circuit using logic.ly	Binary (Bits LSB to MSB) 0 to 15				
	Logicly - Simple I	hemorytizanski lojidy – 0 🍳				
	The Set Vev Total Smiles Rep					
	User Constant  Output Centrols  OF The Constant Of The Cons					
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	Label Bus Meret Significant Bit Mass					
	Patto Full Con P					
2	Create a new 68K project and name the file <i>part2.X68</i>	MOVE.L #%00001111,D1 MOVE.B D1,D2				
		MOVE.B D1,\$2000				
	Edit compile and execute the code	MOVE.B \$2000,D2 MOVE.B \$2000,\$3000				
	across, examine and note contents of data registers and memory. Identify the	MOVE.B \$2000,\$3000				
	memory location of \$3000 and its					
	contents.					
	Create a new 69K project and name the	ORG \$1000				
3	Create a new 68K project and name the file <i>part3.X68</i>	START:				
	•	MOVE.B #\$64,D1				
		LEA text, A1				

## Practical 01

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		MOVE #14 DO				
	Edit compile and execute the code	MOVE #14,D0				
	across and observe the output.	TRAP #15				
		MOVE #3,D0				
		TRAP #15				
		SIMHALT				
		text dc.b 'Data Register: ',0				
1		, ,				
		THE CHART				
		END START				
4	Create a new 68K project and name the file <i>part4.X68</i>					
	Edit compile and execute the code across and observe the input and output.					
ORG \$1000						
ST	ART:					
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						
END STAKI						

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

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Date	13/1/2025	Checked	