<u>Project 1:</u> <u>Programming Assignments using Assembly language</u>

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<u>Programs may work, but to score full mark, your program should be useful, structured (use of subroutines) and user friendly (display messages).</u> <u>Remember all your executable program outputs should be PAUSED, for the instructor to view the result. If exe files are not working, you will not score any point.</u>

- (1) Write a program that will ask the user to input a hexadecimal number and display the number of binary one's within that number.
- (2) Write a program that will ask the user to input his name. Then the program will compare the inputted name with presorted (using DB) name. If the names are same, the program outputs a message "access granted" in the monitor screen.
- (3) Write a program that will ask the user to input a "two digit decimal number" and then display the equivalent hexadecimal number.
- (4) Write a program that will ask the user to inter his name in upper case letter and display the lower case letters.
- (5) Write a program that will,
 - (a) Ask the used to enter a **Secret Message**, that consist of five letters.
 - (b) Store the entered data in a memory location VAR1.
 - (c) Encrypt the entered data & store them in a new memory location of VAR2 (as if after encryption they are transmitted over public internet/telephone line)
 - (d) read the restore the encrypted letters from VAR2 and save them in another new memory location.
- (6) Write a program that will display '+' or '-' depending the signed decimal data, entered from keyboard, is negative or positive.
- (7) Write a program that will display the parity status (PO or PE) of the entered Decimal digit.