Title: Assembly Language Programming Problem Statements

Description: Assembly language is a low-level programming language for a programmable device specific to a particular computer architecture. The codes in this repository are assembly source code which can be run easily using a computer assembler, called as Turbo Assembler (tasm).

Requirements to run the code: TASM

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Problem Statements (You can download the following list from ProblemStatements.pdf file present in this directory):

1. Write 8086 Assembly language program (ALP) to add array of 5 hexadecimal numbers stored in the memory. Accept input from the user, store it in an array and add the array. Display addition answer on the screen

2. Make your program user friendly by providing MENU like:
- *a) Enter the string*
- *b) Calculate length of string by direct method*
- *c) Reverse string*
- *d) Exit*

3. Write an user friendly ALP by providing MENU like:
- *a) Enter the string*
- *b) Calculate length of string by direct method*
- *c) Concatenation of two strings*
- *d) Exit*

4. Write an user friendly ALP by providing MENU like:
- *a) Enter the string*
- *b) Calculate length of string by direct method*
- *c) Number of occurrences of 'a' in the given string*
- *d) Exit*

5. Write an user friendly ALP by providing MENU like:
- *a) Enter the string*
- *b) Calculate length of string by direct method*
- *c) To invert the given string.*
- *d) Exit*

6. Write an user friendly ALP by providing MENU like:
- *a) Enter the string*
- *b) Calculate length of string by direct method*
- *c) Find the first and last character of a string and print it on the screen.*
- *d) Exit*

7. Write an user friendly ALP by providing MENU like:
- *a) Enter two 8 bit numbers*
- *b) Addition*
- *c) Multiplication*

8. Write an user friendly ALP by providing MENU like:

- *a) Enter two 16 bit numbers*
- *b) Addition*
- *c) Multiplication*

9. Write an user friendly ALP by providing MENU like:

- *a) Enter two 8 bit numbers*
- *b) Subtraction*
- *c) Multiplication*

10. Write an user friendly ALP by providing MENU like:

- *a) Enter two 16 bit numbers*
- *b) Subtraction*
- *c) Multiplication*

11. Write 8086 Assembly language program (ALP) to Accept input from the user, store it in an array and find maximum numbers from given array.

12. Write 8086 Assembly language program (ALP) to Accept input from the user, store it in an array and find minimum numbers from given array.

13. Write 8086 Assembly language program (ALP) to Accept input from the user, store it in an array and arrange array in ascending order.

14. Write 8086 Assembly language program (ALP) to accept input from the user, store it in an array and arrange array in descending order.

15. Write an ALP in 8086 to count number of positive and negative numbers from an array of 8-bit integers.

16. Write an ALP in 8086 to add two 32-bit Hexa decimal numbers