Info 2207

MIPS Assembly

Lab 4

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Exercise 1

Write a program that asks user to enter a string of 20 characters at maximum then replaces the vowel letters with '#'. Print the resulting string.

Vowel letters are: 'a', 'e', 'i', 'o', 'u'.

Exercise 2

Write a program that asks user to enter his/her first name and last name, then concatenate them using a third string.

Example:

S1: FirstName

S2: LastName

S3: FirstName LastName

Exercise 3

Write a program to convert a natural number (maximum 1023) into a binary number. Represent a bit (0 or 1) on 1 byte only. Use **lb** (load byte) and **sb** (store byte).

Example

Conversion (19) ->0000010011

$$19/2 = 9*2 + 1$$

$$9/2 = 4*2 + 1$$

$$4/2 = 2*2 + 0$$

$$2/2 = 1*2 + 0$$

$$1/2 = 0*2 + 1$$