Assembly Language Lab

Date: 02.10.19

Assembly Hello world Program :

```
.MODEL SMALL
.STACK 100H
.DATA

M DB 'Hello World $'
M2 DB 'DAFFODIL  INTERNATIONAL UNIVERSITY$'

.CODE

MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    MOV AH,09H
    LEA DX,M

    INT 21H

    MOV AH,02H
    MOV DL,13
    INT 21H

    MOV DL,10
    INT 21H

    MOV AH,09H
    LEA DX,M2
    INT 21H


    MOV AX,4CH
    INT 21H

    MAIN ENDP
END MAIN
```
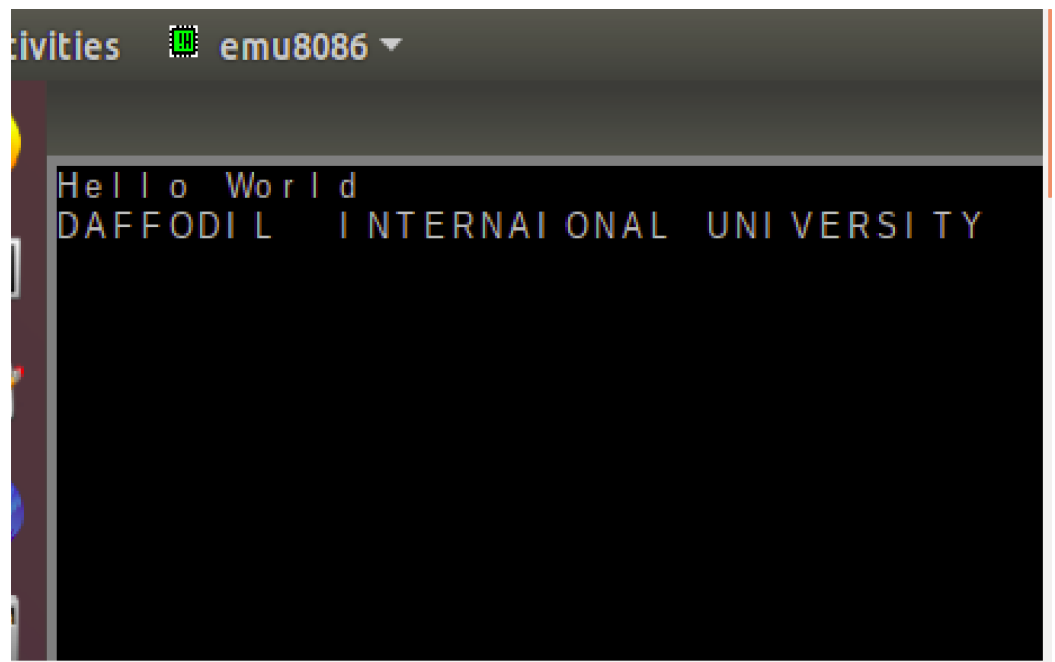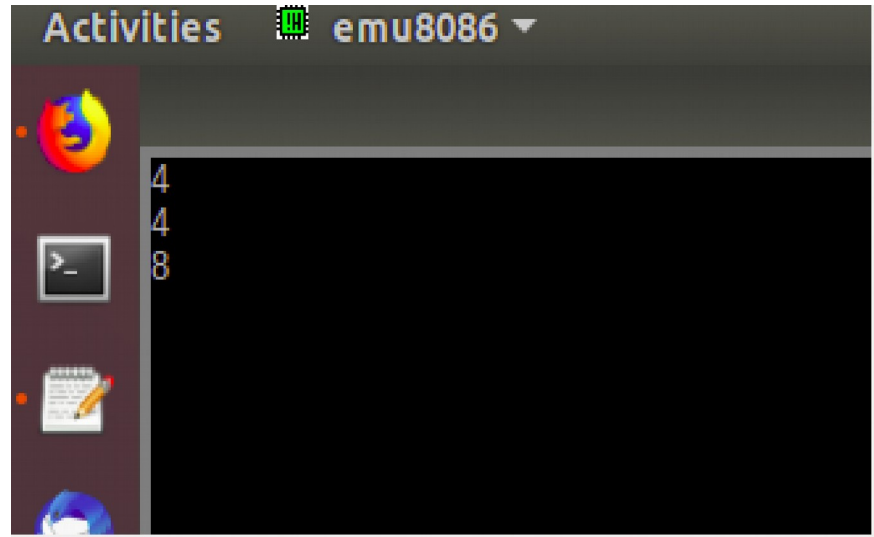
An assembly code to add two single digit numbers

```
.MODEL SMALL
.STACK 100H
.CODE

MAIN  PROC
   MOV  AH,01
   INT  21H
   MOV  BL,AL

   MOV  AH,02H
   MOV  DL,13
   INT  21H

   MOV  DL,10
   INT  21H

   MOV  AH,01
   INT  21H
   MOV  Bh,AL

   MOV  AH,02H
   MOV  DL,13
   INT  21H

   MOV  DL,10
   INT  21H

   ADD  BL,Bh
   SUB  BL,30H

   MOV  AH,02
   MOV  DL,BL
   INT  21H
```

An Assembly code to add two numbers in following way :

    Enter 1st Number: 2
    Enter 2nd Number: 3
    Addition: 5

```
.MODEL SMALL
.STACK 100H
.DATA
A DB 'ENTER 1ST NUMBER $'
B DB 'ENTER 2ND NUMBER $'
R DB 'ADDITION $'

.CODE

MAIN PROC
   MOV AX,@DATA
   MOV DS,AX

   MOV AH,09
   LEA DX,A
   INT 21H

   MOV AH,01
   INT 21H
   MOV BL,AL

   MOV AH,02H
   MOV DL,13
   INT 21H

   MOV DL,10
   INT 21H

   MOV AH,09
   LEA DX,B
   INT 21H

   MOV AH,01
   INT 21H
   MOV Bh,AL

   MOV AH,02H
   MOV DL,13
   INT 21H

   MOV DL,10
   INT 21H
```
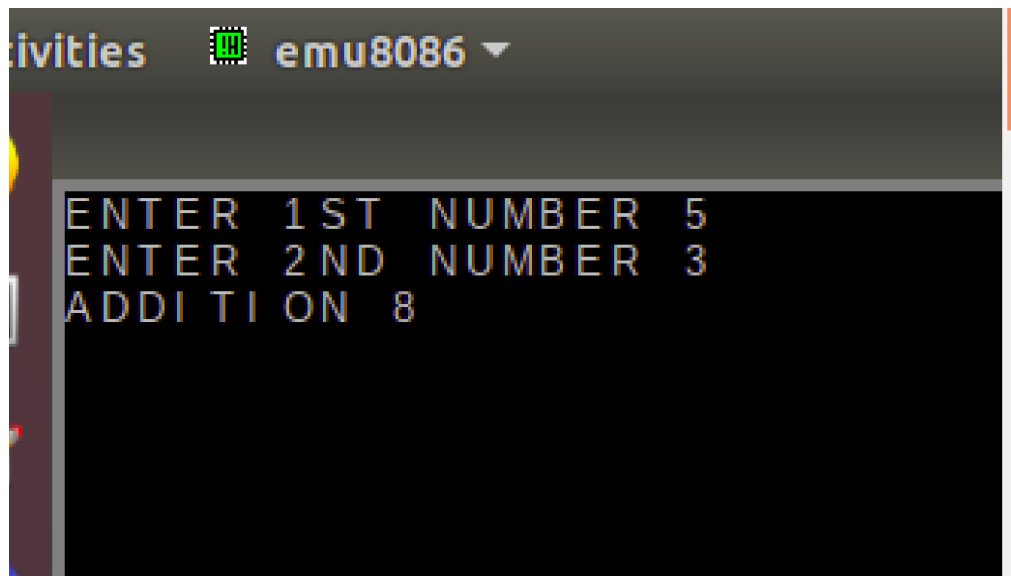
```
MOV AH,09
LEA DX,R
INT 21H

ADD BL,Bh
SUB BL,30H

MOV AH,02
MOV DL,BL
INT 21H
```