**Lab 14**

**Program 1: create a program of one-digit addition.**

.model small

.stack 100h

.data

a db ?

b db ?

.code

start:

mov ah, 01

int 21h

sub al,30h

mov a,al

mov ah, 01

int 21h

sub al ,30h

add a,al

add a,48

aaa

Mov ah, 02

mov dl,a

int 21h

mov ah, 4ch

int 21h

end start

**Program 2: create a program of two-digit addition.**

.model small

.stack 100h

.data

msg1 db " Enter First number$"

msg2 db 0ah, 0dh," Enter second number$"

msg3 db 0ah,0dh," Result$"

a db 0

b db 0

.code

start:

mov ax, @data

mov ds, ax

mov ah, 09

lea dx, msg1

int 21h

mov ah,01

int 21h

mov a,al

mov ah, 09

lea dx, msg2

int 21h

mov ah,01

int 21h

mov b,al

add al,a

mov ah,0

aaa

add al,48

add ah,48

mov bx,ax

mov ah, 09

lea dx, msg3

int 21h

mov ah,02

mov dl, bh

int 21h

mov ah, 02

mov dl, bl

int 21h

mov ah, 4ch

int 21h

end start

**program 3: create a program of subtraction of one-digit.**

.model small

.stack 100h

.data

a db ?

b db ?

.code

start:

mov ah, 01

int 21h

sub al,30h

mov a,al

mov ah, 01

int 21h

sub al ,30h

sub a,al

add a,48

aas

Mov ah, 02

mov dl,a

int 21h

mov ah, 4ch

int 21h

end start

**Task:**

Create a program of two-digit subtraction.

Convert program of above all programs in subroutine.