

Sample Program #1

Show Message

```
.model small
.stack 100h
.data
msg DB 'hello$'
.code
main proc
    mov ax, @data
    mov ds, ax

    LEA dx, msg
    mov ah, 9h
    int 21h

    mov ah, 4ch
    int 21h

main endp
end main
```

Add Two Numbers

```
.model small
.stack 100h
.data

.code
main proc
    mov ax, @data
    mov ds, ax

    mov dx, 4
    mov ax, 5
    add dx, ax
    add dx, 48

    mov ah, 2
    int 21h

    mov ah, 4ch
    int 21h

main endp
end main
```

Subtract Two Numbers

```
.model small
.stack 100h
.data
.code
main proc
    mov ax, @data
    mov ds, ax

    mov dx, 5
    mov ax, 3
    sub dx, ax
    add dx, 48

    mov ah, 2
    int 21h

    mov ah, 4ch
    int 21h

main endp
end main
```

Multiplication Two Numbers

```
.model small
.stack 100h
.data
.code
main proc
    mov ax, @data
    mov ds, ax

    mov dx, 2
    mov ax, 3
    mul dx
    mov dx, ax
    add dx, 48

    mov ah, 2
    int 21h

    mov ah, 4ch
    int 21h

main endp
end main
```

Sample Program #1

Loop Check Program

```
main endp
end main

.model small
.stack 100h
.data
.code
main proc
    mov ax, @data
    mov ds, ax

    mov cx, 4
ltest:
    mov dx, cx
    add dx, 48

    mov ah, 2
    int 21h
    loop ltest

    mov ah, 4ch
    int 21h

main endp
end main
```

Increment/Decrement Program

```
.model small
.stack 100h
.data

.code
main proc
    mov ax, @data
    mov ds, ax

    mov dx, 4
    inc/dec dx
    add dx, 48

    mov ah, 2
    int 21h

    mov ah, 4ch
    int 21h
```