

Lab Task: 4

Code:

```
.MODEL SMALL
```

```
.STACK 100h
```

```
.DATA
```

```
msg1 db "Enter First Number:$"
```

```
msg2 db "Enter Second Number:$"
```

```
msg3 db "Enter Third Number:$"
```

```
msg_small db "Smallest Number: $"
```

```
.CODE
```

```
MAIN PROC
```

```
mov ax, @data
```

```
mov ds, ax
```

```
;First Number
```

```
mov ah, 09h
```

```
lea dx, msg1
```

```
int 21h
```

```
mov ah, 01h
```

```
int 21h
```

```
sub al, 30h
```

```
mov bl, al ; Store first number in BL
```

```
mov ah, 02h
```

```
mov dx, 0dh
```

```
int 21h
```

```
mov dx, 0ah
```

```
int 21h
```

```
;Second Number
```

```
mov ah, 09h
```

```
lea dx, msg2
```

```
int 21h
```

```
mov ah, 01h
```

```
int 21h
```

```
sub al, 30h
```

```
cmp al, bl
```

```
jl store_second
```

```
    jmp check_third
```

```
store_second:  
    mov bl, al
```

```
check_third:
```

```
mov ah,02h  
    mov dx,0dh  
    int 21h  
    mov dx,0ah  
    int 21h
```

```
    ;Third Number  
    mov ah, 09h  
    lea dx, msg3  
    int 21h
```

```
    mov ah, 01h  
    int 21h  
    sub al, 30h  
    cmp al, bl  
    jl store_third  
    jmp display
```

```
store_third:  
    mov bl, al
```

```
    mov ah,02h  
    mov dx,0dh  
    int 21h  
    mov dx,0ah  
    int 21h
```

```
display:
```

```
    ; Display result message  
    mov ah, 09h  
    lea dx, msg_small  
    int 21h
```

```
    ; Convert smallest number to ASCII and print
```

```
mov ah, 02h
add bl, 30h
mov dl, bl
int 21h
```

```
; Exit
mov ah, 4Ch
int 21h
```

```
MAIN ENDP
END MAIN
```

Output:

