```
.MODEL SMALL
.STACK 100H
.DATA
    MSGA DB 'Enter two numbers: $'
    MSGB DB 13,10,'Enter Base: $'
    MSGC DB 'Enter Power: $'
    MSGD DB 'B to the power p is: $'
    COUNT DB 2
    BASE DW ?
    POWER DW ?
    TEMP DW ?

.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    LEA DX,MSGA             ;Print 'Enter two numbers(Max 5 digits):'
    MOV AH,9
    INT 21H

    LEA DX,MSGB             ;Print 'First Number:'
    MOV AH,9
    INT 21H

    MOV DX,0

GET_INPUTS:
    MOV BX,0                ;Clear bx
    MOV AH,1
    INT 21H

    CMP AL,0DH
    JE END_INPUTS           ;If enter

    CON_NUM:
        AND AX,000FH         ;Use full 16 bits of AX
        MOV TEMP,AX
        MOV AX,10
        MUL BX
        MOV BX, AX
        ADD BX,TEMP

    MOV AH,1                 ;Input new digit
    INT 21H
    CMP AL,0DH
    JNE CON_NUM

    END_INPUTS:
        CMP COUNT,1
        JNE GET_N1

        MOV POWER,BX                ;Get power
        JMP GET_N2

        GET_N1:
            MOV BASE,BX             ;Get base

            LEA DX,MSGC             ;Print 'Scond Number:'
            MOV AH,9
            INT 21H


        GET_N2:
            DEC COUNT
            CMP COUNT,0
```

```
            JNE GET_INPUTS

    MOV CX,POWER
    MOV BX,BASE
    MOV AX,1

GET_RESULTS:
    MUL BX
    DEC CX
    CMP CX,0
    JNE GET_RESULTS
    MOV BX,AX

START_PRINT:
    LEA DX,MSGD                 ;B to the power p is:
    MOV AH,9
    INT 21H

    MOV AX,BX
    MOV CX,0
    MOV BX,10

    STOR_RESULTS:               ;stor each digits in stack
        XOR DX,DX
        DIV BX
        PUSH DX
        INC CX
        CMP AX,0
        JNE STOR_RESULTS

    PRINT_RESULTS:              ;print each digits from stack
        MOV AH,2
        POP DX
        ADD DL,48
        INT 21H
        LOOP PRINT_RESULTS

    MOV AH,4CH
    INT 21H

MAIN ENDP
    END MAIN
```