```
.MODEL SMALL
.STACK 100H
.DATA
    ARRAY DB 10,30,45,20,27,26
    TEMP DB 0
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX
    MOV ES,AX
    LEA SI,ARRAY
    LEA DI,TEMP
    XOR AX,AX
    XOR DX,DX
    PUSH AX
    MOV BX,5
    PUSH BX
    CALL MAX
    MOV AX,DX
    CALL OUTDEC
    MOV AH,76
    INT 33
MAIN ENDP

MAX PROC
    PUSH BP
    MOV BP,SP
    MOV BX,[BP+4]
    MOV AX,[BP+6]
    CMP BX,AX
    JG @ELSE
        ;THEN
        PUSH SI
        ADD SI,AX
```

```
        MOV DL,[SI]

        POP SI

        JMP @RETURN

    @ELSE:

    PUSH AX

    MOV CX,BX

    SUB CX,AX

    SHR CX,1

    ADD CX,AX

    PUSH CX

    CALL MAX

    MOV [DI],DL

    INC CX

    PUSH CX

    PUSH BX

    CALL MAX

    CMP [DI],DL

    JNG @RETURN

        ;ELSE

        MOV DL,[DI]

    @RETURN:

        POP BP

        RET 4

MAX ENDP

INCLUDE D:\outdec.asm

END MAIN
```