```
DATA1 SEGMENT
   ORG 2000H
AREA DB 200 DUP (?)
DATA1 ENDS
STACK1 SEGMENT
  DB 50 DUP (?)
SRACK1 ENDS
CODE1 SEGMENT
   ASSUME DS: DATA1, SS: STACK1, CS: CODE1
START: MOV AL, 92H
   MOV DX, 1C3H
   OUT DX, AL
   MOV AX, DATA1
   MOV DS, AX
   MOV SI, 2000H
   MOV BL, 8
   MOV DX, 1C8H
LOP: MOV CX, 18H
LOP2: IN AL, DX
  PUSH DX
   MOV DX, 1C1H
LOP3: IN AL, DX
  TEST AL, 01H
   JZ LOP3
  MOV DX, 1C0H
   IN AL, DX
   MOV [SI], AL
   INC SI
   POP DX
  LOOP LOP2
  INC DX
   DEC BL
   JNZ LOP1
  HLT
CODE1 ENDS
  END START
```