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Sec:05
Course:CSE341
Lab exam:06

Answer to the question no:01

```
.MODEL SMALL
.STACK 100H
.DATA
array1 DB "Nowshin"


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

  ;code here
  MOV CX,7
  MOV SI,0

  PUSH_LOOP:

   MOV AL, array1[SI]
   MOV AH,0
   PUSH AX
   INC SI
  LOOP PUSH_LOOP
  MOV AH,2
  MOV CX,7

  PRINT_LOOP:
   POP DX
   INT 21H
```

```
        LOOP PRINT_LOOP



    MAIN ENDP
END MAIN
```

<u>Answer to the question no:02</u>

```
.MODEL SMALL
.STACK 100H
.DATA
   UserInput DW 5 DUP(?)
   PalindromeMsg DB "Palindrome$", "$"
   NotPalindromeMsg DB "Not a palindrome$", "$"
.CODE
MAIN PROC
   MOV AX, @DATA
   MOV DS, AX

   LEA SI, UserInput
       MOV AH, 1
       MOV CX, 5
```

```asm
    input_loop:
        INT 21H
        MOV [SI], AX
        INC SI
    LOOP input_loop

        MOV AH, 2
        MOV DL, 0AH
        INT 21H
        MOV DL, 0DH
        INT 21H

MOV CX, 5
MOV SI, 0

PUS:
    MOV AX, UserInput[SI]
    MOV AH, 0
    PUSH AX
    INC SI
    LOOP PUS

MOV CX, 2
MOV SI, 0

CHECK:
    POP BX
    MOV DX, UserInput[SI]
    MOV DH, 0
    CMP BX, DX
    JE Palindrome
    JMP Not_Palindrome

Palindrome:
    INC SI
```

```asm
        LOOP CHECK

        LEA DX, PalindromeMsg
        MOV AH, 9
        INT 21H

        JMP EXIT

    Not_Palindrome:
        LEA DX, NotPalindromeMsg
        MOV AH, 9
        INT 21H

    EXIT:
    MAIN ENDP
END MAIN
```
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