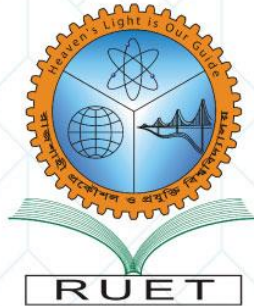


Heaven's Light is Our Guide



RAJSHAH UNIVERSITY OF ENGINEERING & TECHNOLOGY

LAB REPORT

Course No: CSE 3110

Course Name: Sessional based on CSE 3109

Submitted By:

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Roll: 1803108

Section: B

Dept. of Computer Science & Engineering

Rajshahi University of Engineering & Technology

Problem: Reverse a string word by word and set the vowels lowercase

Algorithm

- ➔ Input a string into a variable
- ➔ Traverse the string characters and push it in the stack until it finds a space
- ➔ If a space is found then pop the characters from the stack
- ➔ Repeat step 2 and 3 until the string ends

Code

;reverse a string word by word

;show the consonant uppercase and vowels lower case

.MODEL SMALL

.STACK 100H

.DATA

MSG1 DW ?

.CODE

MAIN PROC

MOV AX,@DATA

MOV DS,AX

MOV CX,0

MOV SI,0

MOV DI,0

MOV AH,1

L1:

INT 21H

CMP AL,0DH

JE L1_END

```
CMP AL,'A'  
JE CHECK_VOWEL  
CMP AL,'E'  
JE CHECK_VOWEL  
CMP AL,'I'  
JE CHECK_VOWEL  
CMP AL,'O'  
JE CHECK_VOWEL  
CMP AL,'U'  
JE CHECK_VOWEL
```

```
MOV MSG1[SI],AX  
INC SI  
JMP L1
```

CHECK_VOWEL:

```
ADD AL,32  
MOV MSG1[SI],AX  
INC SI  
JMP L1
```

L1_END:

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

```
MOV DL,0AH  
INT 21H
```

L2:

MOV BX,MSG1[DI]

CMP BL,' '

JE POP_START

PUSH MSG1[DI]

INC DI

INC CX

CMP DI,SI

JE POP_START

JMP L2

POP_START:

MOV AH,2

POP DX

INT 21H

LOOP POP_START

MOV AH,2

MOV DL,032

INT 21H

INC DI

CMP DI,SI

JG END_

JMP L2

END_:

END MAIN

OUTPUT

