**CS401P Assignment #2 spring 2023**

Name: Abdul Rehman.

VU-ID: BC220424444.

**Solution:**

**Assembly Code:**

ORG 100h

JMP start

msg DB 13, 10, "Enter a string: $"

buffer DB 12

outputMsg DB 13, 10, "You entered: $"

colors DB 1Ah, 7Ch, 0Eh, 0Fh, 0Dh, 0Bh, 09h, 0Ah, 0Ch, 0Eh, 00h

start:

MOV AH, 0

MOV AL, 3

INT 10h

MOV AH, 09h

MOV DX, msg

INT 21h

MOV AH, 0Ah

MOV DX, buffer

INT 21h

MOV AH, 02h

MOV BH, 00h

MOV DH, 05h

MOV DL, 00h

INT 10h

MOV AH, 09h

MOV DX, buffer

INT 21h

MOV SI, buffer + 2

MOV CX, 11

MOV BL, 0

print\_loop:

MOV DL, [SI]

CMP DL, '$'

JE end\_print

MOV AH, 09h

MOV BH, 0

MOV BL, [colors + BX]

AND BL, 0F7h

MOV CX, 1

INT 10h

MOV AH, 02h

INT 21h

INC SI

INC BL

JMP print\_loop

end\_print:

MOV AH, 09h

MOV BH, 0

MOV BL, 07h

MOV CX, 11

MOV DX, outputMsg

INT 21h

MOV AH, 09h

MOV DX, buffer + 2

INT 21h

MOV AH, 4Ch

MOV AL, 0

INT 21h

END

**Output Screenshots:**





