Shaik Sharifa Jahan

AP22110011103

1. Write a program in assembly language to take two single-digit numbers as input and

display whether they are equal or not.

org 100h

mov dx,offset msg\_input1

mov ah,09h

int 21h

mov ah,01h

int 21h

mov bh,al

cmp bh,'0'

jl notdigit

cmp bh,'9'

jg notdigit

mov dx,offset msg\_input2

mov ah,09h

int 21h

mov ah,01h

int 21h

mov bl,al

cmp bl,'0'

jl notdigit

cmp bl,'9'

jg notdigit

cmp bl,bh

je equal

mov dx,offset msg\_output\_not\_equal

mov ah,09h

int 21h

jmp endprogram

equal:

mov dx,offset msg\_output\_equal

mov ah,09h

int 21h

jmp endprogram

notdigit:

mov dx,offset msg\_error

mov ah,09h

int 21h

endprogram:

mov ah,4Ch

int 21h

msg\_input1 db 'Enter integer1:$'

msg\_input2 db 0ah,0dh,'Enter integer2:$'

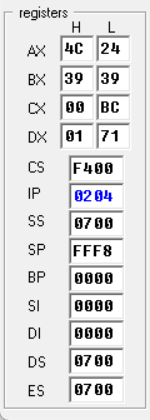
msg\_output\_equal db 0ah,0dh,'The two numbers are equal$'

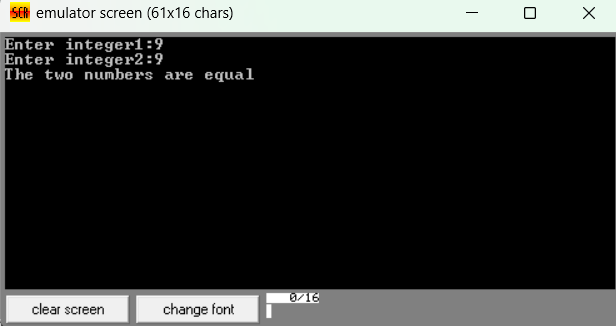
msg\_error db 0ah,0dh,'Not a number$'

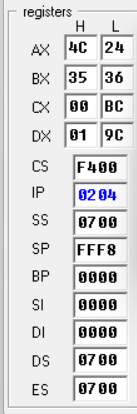
msg\_output\_not\_equal db 0ah,0dh,'The two numbers are not equal$'

end

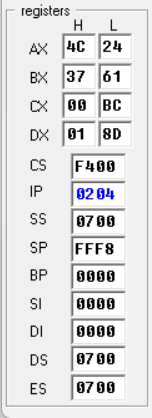
Output:













1. Write a program in assembly language to check whether a single-digit number is odd or

even.

org 100h

mov dx,offset msg\_input

mov ah,09h

int 21h

mov ah,01h

int 21h

mov ah,00

mov bl,2

div bl

cmp ah,0

je equal

mov dx,offset msg\_odd

mov ah,09h

int 21h

jmp endprogram

equal:

mov dx,offset msg\_even

mov ah,09h

int 21h

endprogram:

mov ah,4Ch

int 21h

msg\_input db 'Enter digit:$'

msg\_even db 0ah,0dh,'The number is even$'

msg\_odd db 0ah,0dh,'The number is odd$'

end

Output:

