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***Introduction***

Mineswapper ha a functionality of score in it you have to enter a block number from 0-35 . and these blocks should be free of Mines indigated by M and a free space by N so you have to enter a block number free of M inorder to have a Max score

Game ends after you choose a block having M in it

**Code**

include Irvine32.inc

.data

array11 db " X"," X"," X"," X"," X"," X"

array22 db " X"," X"," X"," X"," X"," X"

array33 db " X"," X"," X"," X"," X"," X"

array44 db " X"," X"," X"," X"," X"," X"

array55 db " X"," X"," X"," X"," X"," X"

array66 db " X"," X"," X"," X"," X"," X"

array1 db "X","X","X","X","X","X"

array2 db "X","X","X","X","X","X"

array3 db "X","X","X","X","X","X"

array4 db "X","X","X","X","X","X"

array5 db "X","X","X","X","X","X"

array6 db "X","X","X","X","X","X"

array\_ans1 db "F","M","M","M","F","M"

array\_ans2 db "M","M","M","F","F","M"

array\_ans3 db "F","M","F","M","M","M"

array\_ans4 db "M","F","M","F","F","F"

array\_ans5 db "M","M","F","F","F","F"

array\_ans6 db "F","F","F","F","F","F"

score dw ?

messege1 db "Enter a block number from 0 to 35 :",0

messege\_loose\_game\_score db "AS YOU LOOSE!! |SCORE|= :",0

messege\_score db "your score is = :",0

loose\_msg db "you loose you enter a wrong table , you loose!! :",0

wrong\_input db "you enter a wrong input !! input should from 0 upto 35 :",0

var\_ar dd ?

instruction1 db "if your block number is free of mine so your score has an incriment of 1 ",0

instruction2 db "if a mine found so your game will be end ",0

free\_var dd 0Fh

mine\_var dd "M",0

endgame\_msg db "you loose!"

temp dd ?

temp1 db ?

temp\_x dd "X"

take\_char db ?

cmp\_arr\_init dd 1

cmp\_arr\_init2 dd 6

cmp\_arr\_init3 dd 12

cmp\_arr\_init4 dd 18

cmp\_arr\_init5 dd 24

cmp\_arr\_init6 dd 30

cmp\_arr1 dd 5

cmp\_arr2 dd 11

cmp\_arr3 dd 17

cmp\_arr4 dd 23

cmp\_arr5 dd 29

cmp\_arr6 dd 35

.code

main PROC

call instructions

call mine\_answer\_table

call game

exit

main endp

;------------------------

game proc

MOV ECX,20

game\_loop:

retake\_your\_input:

mov edx,offset messege1

call WriteString

xor ebx,ebx

push ecx

Call Crlf

call ReadDec

mov temp,eax

mov ebx,temp

cmp ebx,cmp\_arr6

ja wrong\_input\_messege

jmp main\_g

;-------------------------

main\_g:

cmp ebx,cmp\_arr1

jbe check\_fst\_con

jmp check\_snd\_con1

;-------------

check\_fst\_con:

cmp ebx,cmp\_arr\_init

jae xx

xx:

jmp final\_arr1

;-------------

check\_snd\_con1:

cmp ebx,cmp\_arr\_init2

jae check\_snd\_con2

jmp check\_thrd\_con1

;-------------

check\_snd\_con2:

cmp ebx,cmp\_arr2

jae yy

yy:

jmp final\_arr2

;-------------

check\_thrd\_con1:

cmp ebx,cmp\_arr\_init3

jae check\_thrd\_con2

jmp check\_forth\_con1

;--------------

check\_thrd\_con2:

cmp ebx,cmp\_arr3

jae kk

kk:

jmp final\_arr3

;--------------

check\_forth\_con1:

cmp ebx,cmp\_arr\_init4

jae check\_forth\_con2

jmp check\_fifth\_con1

;---------------

check\_forth\_con2:

cmp ebx,cmp\_arr4

jae fh

fh:

jmp final\_arr4

;---------------

check\_fifth\_con1:

cmp ebx,cmp\_arr\_init5

jae check\_fifth\_con2

jmp check\_sixth\_con1

;----------------

check\_fifth\_con2:

cmp ebx,cmp\_arr5

jae am

am:

jmp final\_arr5

;-----------------

check\_sixth\_con1:

cmp ebx,cmp\_arr\_init6

jae check\_sixth\_con2

jmp wrong\_input\_messege

;------------------

check\_sixth\_con2:

cmp ebx,cmp\_arr6

jae ca

ca:

jmp final\_arr6

;-------------------------------------------------- final\_arr1

final\_arr1:

xor edi,edi

xor esi,esi

mov esi,offset array\_ans1

mov edi,offset array1

xor ecx,ecx

xor ebx,ebx

mov ebx,temp

cmp ebx,0

je lkl

jmp pow

lkl:

jmp fv

pow:

mov ecx,temp

ecx\_loop1:

INC esi

INC edi

loop ecx\_loop1

fv:

xor eax,eax

mov eax,[esi]

mov bl, "F"

cmp al,bl

je cb

jmp bbg

cb:

INC score

jmp mineswapper\_lable1

jmp oay\_ja

bbg:

jmp you\_loose

oay\_ja:

mineswapper\_lable1:

xor eax,eax

mov eax,"F"

mov [edi],al

xor edx,edx

mov edx,offset messege\_score

call WriteString

xor eax,eax

mov ax,score

call WriteDec

Call Crlf

xor edi,edi

mov edi,offset array1

mov ecx,lengthof array\_ans1

table1:

mov al,[edi]

call WriteChar

INC edi

loop table1

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array2

mov ecx,lengthof array\_ans2

table11:

mov al,[edi]

call WriteChar

INC edi

loop table11

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array3

mov ecx,lengthof array\_ans3

table111:

mov al,[edi]

call WriteChar

INC edi

loop table111

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array4

mov ecx,lengthof array\_ans4

table1111:

mov al,[edi]

call WriteChar

INC edi

loop table1111

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array5

mov ecx,lengthof array\_ans5

table11111:

mov al,[edi]

call WriteChar

INC edi

loop table11111

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array6

mov ecx,lengthof array\_ans6

table111111:

mov al,[edi]

call WriteChar

INC edi

loop table111111

Call Crlf

Call Crlf

pop ecx

dec ecx

cmp ecx,0

jne game\_loop

;--------------------------------------array\_ans2

final\_arr2:

xor edi,edi

xor esi,esi

mov esi,offset array\_ans2

mov edi,offset array2

xor ecx,ecx

xor ebx,ebx

mov ebx,temp

mov ecx,cmp\_arr\_init2

DEC\_LOOP1:

DEC bl

loop DEC\_LOOP1

cmp bl,0

je lkl2

jmp pow2

lkl2:

jmp fv2

pow2:

mov ecx,ebx

ecx\_loop2:

INC esi

INC edi

loop ecx\_loop2

fv2:

xor edx,edx

xor eax,eax

mov eax,[esi]

mov bl, "F"

cmp al,bl

je ccvb2

jmp bbg2

ccvb2:

INC score

jmp mineswapper\_lable2

bbg2:

jmp you\_loose

mineswapper\_lable2:

xor edx,edx

mov edx,offset messege\_score

call WriteString

xor eax,eax

mov ax,score

call WriteDec

Call Crlf

xor eax,eax

mov eax,"F"

mov [edi],al

xor esi,esi

mov ecx,lengthof array\_ans1

mov esi,offset array1

table2:

mov al,[esi]

call WriteChar

INC esi

loop table2

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array2

mov ecx,lengthof array\_ans2

table22:

mov al,[edi]

call WriteChar

INC edi

loop table22

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array3

mov ecx,lengthof array\_ans3

table222:

mov al,[esi]

call WriteChar

INC esi

loop table222

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array4

mov ecx,lengthof array\_ans4

table2222:

mov al,[esi]

call WriteChar

INC esi

loop table2222

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array5

mov ecx,lengthof array\_ans5

table22222:

mov al,[esi]

call WriteChar

INC esi

loop table22222

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array6

mov ecx,lengthof array\_ans6

table222222:

mov al,[esi]

call WriteChar

INC esi

loop table222222

Call Crlf

Call Crlf

pop ecx

dec ecx

cmp ecx,0

jne game\_loop

;--------------------------array\_ans3

final\_arr3:

xor edi,edi

xor esi,esi

mov esi,offset array\_ans3

mov edi,offset array3

xor ecx,ecx

xor ebx,ebx

mov ebx,temp

mov ecx,cmp\_arr\_init3

DEC\_LOOP2:

DEC bl

loop DEC\_LOOP2

cmp bl,0

je lkl3

jmp pow3

lkl3:

jmp fv3

pow3:

mov ecx,ebx

ecx\_loop3:

INC esi

INC edi

loop ecx\_loop3

fv3:

xor edx,edx

xor eax,eax

mov eax,[esi]

mov bl, "F"

cmp al,bl

je ccvb3

jmp bbg3

ccvb3:

INC score

jmp mineswapper\_lable3

bbg3:

jmp you\_loose

mineswapper\_lable3:;-----------------------------------

xor edx,edx

mov edx,offset messege\_score

call WriteString

xor eax,eax

mov ax,score

call WriteDec

Call Crlf

xor eax,eax

mov eax,"F"

mov [edi],al

xor esi,esi

mov ecx,lengthof array3

mov esi,offset array1

table3:

mov al,[esi]

call WriteChar

INC esi

loop table3

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array2

mov ecx,lengthof array\_ans3

table33:

mov al,[esi]

call WriteChar

INC esi

loop table33

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array3

mov ecx,lengthof array\_ans3

table333:

mov al,[edi]

call WriteChar

INC edi

loop table333

Call Crlf

Call Crlf

xor edi,edi

xor esi,esi

mov esi,offset array4

mov ecx,lengthof array\_ans4

table3333:

mov al,[esi]

call WriteChar

INC esi

loop table3333

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array5

mov ecx,lengthof array\_ans5

table33333:

mov al,[esi]

call WriteChar

INC esi

loop table33333

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array6

mov ecx,lengthof array\_ans6

table333333:

mov al,[esi]

call WriteChar

INC esi

loop table333333

Call Crlf

Call Crlf

pop ecx

dec ecx

cmp ecx,0

jne game\_loop

;--------------------------array\_ans4

final\_arr4:

xor edi,edi

xor esi,esi

mov esi,offset array\_ans4

mov edi,offset array4

xor ecx,ecx

xor ebx,ebx

mov ebx,temp

mov ecx,cmp\_arr\_init4

DEC\_LOOP4:

DEC bl

loop DEC\_LOOP4

cmp bl,0

je lkl4

jmp pow4

lkl4:

jmp fv4

pow4:

mov ecx,ebx

ecx\_loop4:

INC esi

INC edi

loop ecx\_loop4

fv4:

xor edx,edx

xor eax,eax

mov eax,[esi]

mov bl, "F"

cmp al,bl

je ccvb4

jmp bbg4

ccvb4:

INC score

jmp mineswapper\_lable4

bbg4:

jmp you\_loose

mineswapper\_lable4:;-----------------------------------

xor edx,edx

mov edx,offset messege\_score

call WriteString

Call Crlf

xor eax,eax

mov ax,score

call WriteDec

xor eax,eax

mov eax,"F"

mov [edi],al

xor esi,esi

mov ecx,lengthof array\_ans1

mov esi,offset array1

table4:

mov al,[esi]

call WriteChar

INC esi

loop table4

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array2

mov ecx,lengthof array\_ans4

table44:

mov al,[esi]

call WriteChar

INC esi

loop table44

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array3

mov ecx,lengthof array\_ans4

table444:

mov al,[esi]

call WriteChar

INC esi

loop table444

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array4

mov ecx,lengthof array\_ans4

table4444:

mov al,[edi]

call WriteChar

INC edi

loop table4444

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array5

mov ecx,lengthof array\_ans5

table44444:

mov al,[esi]

call WriteChar

INC esi

loop table44444

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array6

mov ecx,lengthof array\_ans6

table444444:

mov al,[esi]

call WriteChar

INC esi

loop table444444

Call Crlf

Call Crlf

pop ecx

dec ecx

cmp ecx,0

jne game\_loop

wrong\_input\_messege:

xor edx,edx

mov edx,offset wrong\_input

call WriteString

jmp retake\_your\_input

;--------------------------array\_ans5

final\_arr5:

xor edi,edi

xor esi,esi

mov esi,offset array\_ans5

mov edi,offset array5

xor ecx,ecx

xor ebx,ebx

mov ebx,temp

mov ecx,cmp\_arr\_init5

DEC\_LOOP5:

DEC bl

loop DEC\_LOOP5

cmp bl,0

je lkl5

jmp pow5

lkl5:

jmp fv5

pow5:

mov ecx,ebx

ecx\_loop5:

INC esi

INC edi

loop ecx\_loop5

fv5:

xor edx,edx

xor eax,eax

mov eax,[esi]

mov bl, "F"

cmp al,bl

je ccvb5

jmp bbg5

ccvb5:

INC score

jmp mineswapper\_lable5

bbg5:

jmp you\_loose

mineswapper\_lable5:;-----------------------------------

xor edx,edx

mov edx,offset messege\_score

call WriteString

Call Crlf

xor eax,eax

mov ax,score

call WriteDec

xor eax,eax

mov eax,"F"

mov [edi],al

xor esi,esi

mov ecx,lengthof array\_ans5

mov esi,offset array1

table5:

mov al,[esi]

call WriteChar

INC esi

loop table5

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array2

mov ecx,lengthof array\_ans5

table55:

mov al,[esi]

call WriteChar

INC esi

loop table55

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array3

mov ecx,lengthof array\_ans5

table555:

mov al,[esi]

call WriteChar

INC esi

loop table555

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array4

mov ecx,lengthof array\_ans5

table5555:

mov al,[esi]

call WriteChar

INC esi

loop table5555

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array5

mov ecx,lengthof array\_ans5

table55555:

mov al,[edi]

call WriteChar

INC edi

loop table55555

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array6

mov ecx,lengthof array\_ans6

table555555:

mov al,[esi]

call WriteChar

INC esi

loop table555555

Call Crlf

Call Crlf

pop ecx

dec ecx

cmp ecx,0

jne game\_loop

;--------------------------array\_ans6

final\_arr6:

xor edi,edi

xor esi,esi

mov esi,offset array\_ans6

mov edi,offset array6

xor ecx,ecx

xor ebx,ebx

mov ebx,temp

mov ecx,cmp\_arr\_init6

DEC\_LOOP6:

DEC bl

loop DEC\_LOOP6

cmp bl,0

je lkl6

jmp pow6

lkl6:

jmp fv6

pow6:

mov ecx,ebx

ecx\_loop6:

INC esi

INC edi

loop ecx\_loop6

fv6:

xor edx,edx

xor eax,eax

mov eax,[esi]

mov bl, "F"

cmp al,bl

je ccvb6

jmp bbg6

ccvb6:

INC score

jmp mineswapper\_lable6

bbg6:

jmp you\_loose

mineswapper\_lable6:;-----------------------------------

xor edx,edx

mov edx,offset messege\_score;===========================++++++++++++

call WriteString

xor eax,eax

mov ax,score

call WriteDec

Call Crlf

xor eax,eax

mov eax,"F"

mov [edi],al

xor esi,esi

mov ecx,lengthof array\_ans1

mov edi,offset array1

table6:

mov al,[esi]

call WriteChar

INC esi

loop table6

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array2

mov ecx,lengthof array\_ans5

table66:

mov al,[esi]

call WriteChar

INC esi

loop table66

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array3

mov ecx,lengthof array\_ans5

table666:

mov al,[esi]

call WriteChar

INC esi

loop table666

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array4

mov ecx,lengthof array\_ans5

table6666:

mov al,[esi]

call WriteChar

INC esi

loop table6666

Call Crlf

Call Crlf

xor esi,esi

mov esi,offset array5

mov ecx,lengthof array\_ans5

table66666:

mov al,[esi]

call WriteChar

INC esi

loop table66666

Call Crlf

Call Crlf

xor edi,edi

mov edi,offset array6

mov ecx,lengthof array\_ans6

table666666:

mov al,[edi]

call WriteChar

INC edi

loop table666666

Call Crlf

Call Crlf

pop ecx

dec ecx

cmp ecx,0

jne game\_loop

;-------------------------------------

you\_loose:

xor edx,edx

mov edx,offset loose\_msg

call WriteString

Call Crlf

xor edx,edx

mov edx,offset messege\_loose\_game\_score

call WriteString

xor eax,eax

mov ax,score

call WriteDec

RET

game endp

;---------------------

instructions proc

mov edx,OFFSET instruction1

call WriteString

xor edx,edx

call Crlf

call Crlf

mov edx,OFFSET instruction2

call WriteString

RET

instructions endp

;--------------------------------

mine\_answer\_table proc

mov esi,offset array11

mov ecx,lengthof array11

call Crlf

call Crlf

call Crlf

l1:

mov ax,[esi]

call WriteChar

inc esi

loop l1

call Crlf

mov esi,offset array22

mov ecx,lengthof array22

l2:

mov al,[esi]

call WriteChar

inc esi

loop l2

call Crlf

mov esi,offset array33

mov ecx,lengthof array33

l3:

mov al,[esi]

call WriteChar

inc esi

loop l3

call Crlf

mov esi,offset array44

mov ecx,lengthof array44

l4:

mov al,[esi]

call WriteChar

inc esi

loop l4

call Crlf

mov esi,offset array55

mov ecx,lengthof array55

l5:

mov al,[esi]

call WriteChar

inc esi

loop l5

call Crlf

mov esi,offset array66

mov ecx,lengthof array66

l6:

mov al,[esi]

call WriteChar

inc esi

loop l6

call Crlf

RET

mine\_answer\_table endp

;----------------------------------

end main

**screen shots**







