組語專題-海盜桶

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INCLUDE Irvine32.inc

main EQU start@0

BucketWidth=18

BucketHeight=17

.data

bucket BYTE ' \_\_\_\_\_\_ '

BYTE ' | . . | '

BYTE ' | | '

BYTE ' | \/ | '

BYTE ' |\_\_ \_\_| '

BYTE ' || '

BYTE ' \_\_\_\_||\_\_\_\_ '

BYTE ' / | | \ '

BYTE ' / 0 4 | \ '

BYTE '/ | 9 \'

BYTE '| 1 | |'

BYTE '| 7 | | |'

BYTE '| | 3 5 |'

BYTE '| 8 | |'

BYTE '\ | 6 /'

BYTE ' \ 2 / '

BYTE ' \\_\_\_\_\_\_\_\_\_\_\_\_/ '

dead BYTE ' | x x | '

BYTE ' | | '

BYTE ' | /\ | '

blade BYTE '+';插劍後的洞口圖案

turn1 BYTE 'Player1''s turn',0

turn2 BYTE 'Player2''s turn',0

hit1 BYTE 'Player1 loses! Press any key to restart',0

hit2 BYTE 'Player2 loses! Press any key to restart',0

stabbed BYTE 'This hole has already been stabbed, please choose another hole',0

space BYTE 100 DUP(' ') ;cover the original message

wrongnumber DWORD ? ;海盜會彈出的洞口位置

message COORD <0,0> ;message's initial position

player BYTE ? ;show the current player

hole STRUCT

position COORD <?,?>

ifstabbed BYTE ? ;儲存插劍狀態

hole ENDS

hole0 hole <<15,12>,>

hole1 hole <<12,14>,>

hole2 hole <<14,19>,>

hole3 hole <<19,16>,>

hole4 hole <<20,12>,>

hole5 hole <<24,16>,>

hole6 hole <<21,18>,>

hole7 hole <<15,15>,>

hole8 hole <<12,17>,>

hole9 hole <<22,13>,>

outputHandle DWORD 0

bytesWritten DWORD 0

count DWORD 0

xyPosition COORD <10,5> ;draw bucket from <10,5>

cellsWritten DWORD ?

attributes WORD BucketWidth DUP(0Eh) ;yellow

.code

PutKnife MACRO coor ;儲存已插劍的洞口

INVOKE WriteConsoleOutputAttribute,

outputHandle,

OFFSET attributes,

1,

coor,

OFFSET cellsWritten

INVOKE WriteConsoleOutputCharacter,

outputHandle,

OFFSET blade,

1,

coor,

OFFSET cellsWritten

ENDM

main PROC

INVOKE GetStdHandle,std\_output\_handle

mov outputHandle,eax

Initialize: ;初始化所有變數

call Clrscr; 清除螢幕

mov eax,10

call RandomRange ;choose the number between 0~9

mov wrongnumber,eax

mov player,1

mov xyPosition.X,10

mov xyPosition.Y,5

mov esi,OFFSET bucket

mov ecx,BucketHeight

mov hole0.ifstabbed,0 ;還沒插劍的狀態

mov hole1.ifstabbed,0

mov hole2.ifstabbed,0

mov hole3.ifstabbed,0

mov hole4.ifstabbed,0

mov hole5.ifstabbed,0

mov hole6.ifstabbed,0

mov hole7.ifstabbed,0

mov hole8.ifstabbed,0

mov hole9.ifstabbed,0

DrawBucket: ;畫出海盜桶

push ecx

INVOKE WriteConsoleOutputAttribute, ;color

outputHandle,

OFFSET attributes,

BucketWidth,

xyPosition,

OFFSET cellsWritten

INVOKE WriteConsoleOutputCharacter, ;sign

outputHandle,

esi,

BucketWidth,

xyPosition,

OFFSET cellsWritten

inc xyPosition.Y

add esi,BucketWidth

pop ecx

loop DrawBucket

Play: ; 處理兩個玩家的回合訊息

INVOKE SetConsoleCursorPosition, ;set cursor to the message's initial position

outputHandle,

message

INVOKE WriteConsoleOutputCharacter, ;cover the former message

outputHandle,

offset space,

lengthof space,

message,

OFFSET cellsWritten

.IF player==1

mov edx,offset turn1

call WriteString

.ENDIF

.IF player==2

mov edx,offset turn2

call WriteString

.ENDIF

Stab: ; 處理插劍後的結果

call ReadChar

.IF ax==0B30h

.IF hole0.ifstabbed==1 ;如果已經插劍了會提醒玩家

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole0.position

mov hole0.ifstabbed,1;改變插劍狀態

.IF wrongnumber==0 ;插到wrongnumber號洞口就輸了

jmp Lose

.ENDIF

.ENDIF

.IF ax==0231h

.IF hole1.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole1.position

mov hole1.ifstabbed,1

.IF wrongnumber==1

jmp Lose

.ENDIF

.ENDIF

.IF ax==0332h

.IF hole2.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole2.position

mov hole2.ifstabbed,1

.IF wrongnumber==2

jmp Lose

.ENDIF

.ENDIF

.IF ax==0433h

.IF hole3.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole3.position

mov hole3.ifstabbed,1

.IF wrongnumber==3

jmp Lose

.ENDIF

.ENDIF

.IF ax==0534h

.IF hole4.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole4.position

mov hole4.ifstabbed,1

.IF wrongnumber==4

jmp Lose

.ENDIF

.ENDIF

.IF ax==0635h

.IF hole5.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole5.position

mov hole5.ifstabbed,1

.IF wrongnumber==5

jmp Lose

.ENDIF

.ENDIF

.IF ax==0736h

.IF hole6.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole6.position

mov hole6.ifstabbed,1

.IF wrongnumber==6

jmp Lose

.ENDIF

.ENDIF

.IF ax==0837h

.IF hole7.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole7.position

mov hole7.ifstabbed,1

.IF wrongnumber==7

jmp Lose

.ENDIF

.ENDIF

.IF ax==0938h

.IF hole8.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole8.position

mov hole8.ifstabbed,1

.IF wrongnumber==8

jmp Lose

.ENDIF

.ENDIF

.IF ax==0A39h

.IF hole9.ifstabbed==1

INVOKE SetConsoleCursorPosition,

outputHandle,

message

mov edx,offset stabbed

call WriteString

jmp Stab

.ENDIF

PutKnife hole9.position

mov hole9.ifstabbed,1

.IF wrongnumber==9

jmp Lose

.ENDIF

.ENDIF

.IF player==1

mov player,2

jmp Play

.ENDIF

.IF player==2

mov player,1

.ENDIF

jmp Play

Lose: ; 改變海盜桶模樣、印出輸家名字並重新開始遊戲

mov ecx,3

mov esi,OFFSET dead

mov xyPosition.X,10

mov xyPosition.Y,6

DrawDead: ;畫出輸掉後的哭臉

push ecx

INVOKE WriteConsoleOutputAttribute,

outputHandle,

OFFSET attributes,

BucketWidth,

xyPosition,

OFFSET cellsWritten

INVOKE WriteConsoleOutputCharacter,

outputHandle,

esi,

BucketWidth,

xyPosition,

OFFSET cellsWritten

inc xyPosition.Y

add esi,BucketWidth

pop ecx

loop DrawDead

INVOKE SetConsoleCursorPosition,

outputHandle,

message

INVOKE WriteConsoleOutputCharacter, ;cover the former message

outputHandle,

offset space,

lengthof space,

message,

OFFSET cellsWritten

.IF player==1

mov edx,offset hit1

.ENDIF

.IF player==2

mov edx,offset hit2

.ENDIF

call WriteString

call ReadChar

jmp Initialize;重新開始遊戲

goExit:

exit

main ENDP

END main