

Programming Fundamentals

Coal Project

Dice Roll Game

Section (C)

|  |  |
| --- | --- |
| Instructor | Uzair Tahir |
| Semester | Fall 2019 |

**Name:**

**Waqas Manzoor**

**Muhammad Zain**

**Roll No:**

**18F\_0383**

**18F\_0415**

**FAST School of Computing**

# Description

Our game is name is dice roll game in this game there are 2 players both the players roll the dice one by one and both of them will get 10 chances to roll the dice. The player who got high score will win

# Code

include Irvine32.inc

includelib Irvine32.lib

.data

;countgameplay DWORD 10

;popup box window

msgEnd BYTE "Do you want to continue?",0

msgEndCaption BYTE "Program Exit...",0

answer DWORD ?

;for string input max size

MAX = 80

;for printing gamename

gamename db " ---------------------------------------------------------- " , 0dh , 0ah

db " ---------------------------------------------------------- " , 0dh , 0ah

db " ||||||| DICE ROLL GAME ||||||| " , 0dh , 0ah

db " ---------------------------------------------------------- " , 0dh , 0ah

db " ---------------------------------------------------------- " , 0

;for saving scores of both players

P1score DWORD 0

P2score DWORD 0

;for saving name of both players

P1name BYTE MAX DUP(?)

P2name BYTE MAX DUP(?)

;for printing shapes of dices

dice1 db " ------" ,0dh , 0ah

db "| |" ,0dh , 0ah

db "| O |" ,0dh , 0ah

db "| |" ,0dh , 0ah

db " ------" , 0

dice2 db " ------" ,0dh , 0ah

db "| O|" ,0dh , 0ah

db "| |" ,0dh , 0ah

db "|O |" ,0dh , 0ah

db " ------" , 0

dice3 db " ------" ,0dh , 0ah

db "| O|" ,0dh , 0ah

db "| O |" ,0dh , 0ah

db "|O |" ,0dh , 0ah

db " ------" , 0

dice4 db " ------" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db "| |" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db " ------" , 0

dice5 db " ------" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db "| O |" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db " ------" , 0

dice6 db " ------" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db "|O O|" ,0dh , 0ah

db " ------" , 0

;different messages for user

turnmsg db " turn: ",0

rollmsg db "Press Enter to roll dice...." , 0

msg2 db "Enter Player 1 name: " , 0

msg3 db "Enter Player 2 name: " , 0

P1totalscore db "TOTAL SCORE OF PLAYER 1: " , 0

P2totalscore db "TOTAL SCORE OF PLAYER 2: " , 0

;for space printing

spacemsg db ": " , 0

spacemsg2 db " " , 0

;winning messages

cong BYTE "CONGRATULATIONS......!!!!!" , 0

wincap BYTE "DICE ROLL GAME" , 0

Draw BYTE "MATCH DRAW!!!!!" , 0

winner BYTE " WINNER!!!!!" , 0

.code

;procedure for printing dices

printdice proc

cmp ax , 1

je d1

cmp ax , 2

je d2

cmp ax , 3

je d3

cmp ax , 4

je d4

cmp ax , 5

je d5

cmp ax , 6

je d6

d1:

mov edx , offset dice1

call writestring

jmp next

d2:

mov edx , offset dice2

call writestring

jmp next

d3:

mov edx , offset dice3

call writestring

jmp next

d4:

mov edx , offset dice4

call writestring

jmp next

d5:

mov edx , offset dice5

call writestring

jmp next

d6:

mov edx , offset dice6

call writestring

jmp next

next:

ret

printdice endp

;for inputting players name

playerin PROC

call crlf

mov edx , offset msg2

call writestring

mov edx , offset P1name

mov ecx , MAX

call readstring

call crlf

mov edx , offset msg3

call writestring

mov edx , offset P2name

mov ecx , MAX

call readstring

ret

playerin endp

;gamepalay procedure

dice\_gameplay PROC

mov ecx , 10

call randomize

P1game:

;LD1:

call crlf

mov edx , offset P1name

call writestring

mov edx , offset turnmsg

call writestring

call crlf

mov edx , offset rollmsg

call writestring

call crlf

call readchar

mov eax , 0

mov eax , 6

call randomrange

inc eax

mov edx , offset spacemsg2

call writestring

call crlf

ADD P1score , eax

call printdice

call crlf

mov eax , P1score

mov edx , offset P1totalscore

call writestring

call writedec

;LOOP LD1

;LD2:

call crlf

mov edx , offset P2name

call writestring

mov edx , offset turnmsg

call writestring

call crlf

mov edx , offset rollmsg

call writestring

call crlf

call readchar

mov eax , 0

mov eax , 6

call randomrange

inc eax

mov edx , offset spacemsg2

call writestring

call crlf

ADD P2score , eax

call printdice

call crlf

mov eax , P2score

mov edx , offset P2totalscore

call writestring

call writedec

call readchar

call clrscr

dec ecx

cmp ecx , 0

je donegameplay

jmp P1game

;LOOP LD2

donegameplay:

ret

dice\_gameplay endp

;for printing scores

print\_score PROC

mov edx , offset P1name

call writestring

mov edx , offset spacemsg

call writestring

mov eax , P1score

call writedec

call crlf

mov edx , offset P2name

call writestring

mov edx , offset spacemsg

call writestring

mov eax , P2score

call writedec

ret

print\_score endp

;for choosing winner

dice\_winner PROC

mov eax , P1score

cmp eax , P2score

Je DRAWGAME

Ja P1win

;INVOKE Str\_copy , ADDR P2name , ADDR WINP

mov edx,offset cong

mov ebx,0

call MsgBox

mov edx , offset P2name

call writestring

mov edx , offset winner

call writestring

jmp donewin

P1win:

;INVOKE Str\_copy , ADDR P1name , ADDR WINP

mov edx,offset cong

mov ebx,0

call MsgBox

mov edx , offset P1name

call writestring

mov edx , offset winner

call writestring

jmp donewin

DRAWGAME:

mov edx,offset Draw

mov ebx,offset wincap

call MsgBox

donewin:

ret

dice\_winner endp

STARTGAME PROC

abovereplay:

mov EDX,OFFSET msgEnd

mov EBX,OFFSET msgEndCaption

call MsgBoxAsk

mov answer , eax

cmp answer,IDYES

jne next

mov eax,yellow+(lightblue\*16)

call SetTextColor

mov edx , offset gamename

call writestring

mov eax,OFFSET gamename

mov ebx,0 ; no caption

call MsgBox

call playerin

call crlf

call clrscr

call dice\_gameplay

call crlf

call readchar

call clrscr

call print\_score

call crlf

call readchar

call dice\_winner

call readchar

call clrscr

jmp abovereplay

next:

ret

STARTGAME endp

;main procedure

main proc

call STARTGAME

call waitmsg

exit

main endp

end main

# Screenshot





