// Ray Mannion Bingo Project

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

#include<time.h>

void makeCard();

void loadGame();

void drawNum();

void saveGame();

main(void)

{

//FILE\* filep;// creates file to write too

srand(time(NULL));

int option;

int playOpt=0;

int bingo[3][9];// creates an array

int row =0;

int col=0;

int number;

int numPlayers=0;

//filep = fopen("bingo.txt", "r");// opens text file

printf("=================================\n");

printf(" BINGO\n");

printf("=================================\n");

printf("Please enter 1 to start a new game\n");

printf("Please enter 2 to load a game\n");

printf("Option : ");

scanf("%d", &option);

switch(option)

{

case 1:

makeCard();// calls makeCard function

case 2:

loadGame(row, col, bingo[3][9], numPlayers);// not working

}

printf("Press 3 to draw a number \n");

printf("Press 4 to save game & exit \n");

printf("Option : ");

scanf("%d", &playOpt);

switch(playOpt)

{

case 3:

drawNum(playOpt);// calls drawNum function

case 4:

saveGame(row, col, bingo[3][9], numPlayers);// not working

}

getch();

}// main

void makeCard()

{

FILE\* filep;// creates file to write too

int bingo[3][9];// creates an array

int row;

int col;

int count = 0;

int number;

int numPlayers;

filep = fopen("bingo.txt", "a");// allows user to amend the text file

printf("\nEnter Number of players ( 2-6 ): ");

scanf("%d", &numPlayers);

for (int i = 1; i <= numPlayers; i++)

{

for (row = 0; row < 3; row++)

{

for (col = 0; col < 9; col++)

{

bingo[row][col] = rand() \* 9 / RAND\_MAX + 1 + col \* 10;// generates a 3x9 matrix

}// for

}// for

for (row = 0; row < 3; row++)

{

count = 0; // counter blanks

do

{

number = (((rand() \* 9) / RAND\_MAX));// generates a num between 1-9

if (bingo[row][number] != 0)

{

bingo[row][number] = 0; //forces num at each position to be 0

count++; //increment

}//if

}//do

while (count < 4); //do a 0 on each row while it is <4.

}//for

printf("Player %d Card \n", i);// print card number

for (row = 0; row < 3; row++)

{

for (col = 0; col < 9; col++)

{

if (bingo[row][col] == 0)

{

printf("X");

}

printf("%d\t", bingo[row][col]);// prints card

}// for

printf("\n");

}// for

printf("\n");

}// outer for

if (filep != NULL)

{

// prints data to text file, but will only print last card for the number of players

for (int i = 1; i <= numPlayers; i++)

{

fprintf(filep, "Player %d Card \n", i);// print card number

for (row = 0; row < 3; row++)

{

for (col = 0; col < 9; col++)

{

if (bingo[row][col] == 0)

{

fprintf(filep, "X");

}

fprintf(filep, "%d\t", bingo[row][col]);

}// for

fprintf(filep, "\n");

}// for

fprintf(filep, "\n");

}

}// if

if (filep != NULL)

{

fclose(filep);// closes text file

}// if

}// makeCard

void loadGame(int row,int col,int bingo[3][9],int numPlayers)// load file didn't work

{

/\*FILE\* filep;// creates file to write too

filep = fopen("bingo.txt", "r");// opens text file

int load;

int empty = 0;

if (filep == NULL)

{

printf("The file cannot be opened to read\n");

empty = 1;// checks if file contains data

}

else

{

while (!feof(filep))

{

load = fscanf(filep, "%d\t", bingo[row][col]);

// reads in the data in the text file

if (load > 0)

{

// prints data to screen

for (int i = 1; i <= numPlayers; i++)

{

printf("Player %d Card \n", i);// print card number

for (row = 0; row < 3; row++)

{

for (col = 0; col < 9; col++)

{

printf("%d\t", bingo[row][col]);// prints card

}// for

printf("\n");

}// for

fprintf(filep, "\n");

}

}

}

fclose(filep);// closes text file

}\*/

}// loadGame

void saveGame(int row, int col, int bingo[3][9], int numPlayers)// i tried to get this function to save the bingo cards to file

{ // it didn't work for me so i tried to save them to file as they

/\*FILE\* filep;// creates file to write too generated in the makeCard function

filep = fopen("bingo.txt", "a");// allows user to amend the text file

if (filep != NULL)

{

// prints data to text file

for (int i = 1; i <= numPlayers; i++)

{

fprintf(filep, "Player %d Card \n", i);// print card number

for (row = 0; row < 3; row++)

{

for (col = 0; col < 9; col++)

{

fprintf(filep, "%d\t", bingo[row][col]);

}// for

fprintf(filep, "\n");

}// for

fprintf(filep, "\n");

}

}// if

if (filep != NULL)

{

fclose(filep);// closes text file

}// if\*/

}// saveGame

void drawNum(int playOpt)

{

while (playOpt == 3)

{

int numDrawn = rand() % 90 + 1;// generates a number between 1-90

printf("Number drawn is : %d", numDrawn);

printf("\nPress 3 to draw another number \n");

printf("Press 4 to save game & exit \n");

printf("Option : ");

scanf("%d", &playOpt);

}

}// drawNum