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// Chuong trinh dat ve may bay gom 13 hang va 6 ghe A B C D E F

// Ky hieu: \*: cho con trong X: cho da dat

#include <iostream>

#include <ctime>

const int MAX = 100;

using namespace std;

void NhapMang(char NhapMang[][MAX], int hang, int cot) ;

void XuatMang(char NhapMang[][MAX], int hang, int cot);

void BangDatVe(char NhapMang[][MAX],int hang, int cot, int hangchon, int cotchon);

void menu(char NhapMang[][MAX], int hang, int cot);

int main()

{

char a[MAX][MAX];

int hang = 13, cot = 6;

char Tiep;

NhapMang(a, hang, cot); // khong goi ham xuat mang vi trong menu da xuat 1 lan r

do {

menu(a, hang, cot); // chua ham xuat mang

cout << "\nBan co muon tiep tuc dat ve hay khong (y : yes, n : no): ";

cin >> Tiep;

} while (Tiep == 'y' || Tiep == 'Y');

if ( Tiep == 'N' || Tiep == 'n' )

cout <<"Chao tam biet quy khach. Hen gap lai quy khach vao mot ngay khong xa.\n ";

system("pause");

return 0;

}

void NhapMang(char NhapMang[][MAX], int hang, int cot)

{

srand(time(NULL));

int ranDom = 0;

for (int i = 0; i < hang; i++)

{

for (int j = 0; j < cot; j++)

{

if ((ranDom = rand() % 100) <= 50) // Khoi tao so ngau nhien: neu ra so <= 50 thi in dau \*, ngc lai in X

{

NhapMang[i][j] = '\*';//MA ASKII dau \* la 42

}

else

{

NhapMang[i][j] = 'X';// Tuong tu X : 88

}

}

}

}

void XuatMang(char NhapMang[][MAX], int hang, int cot)

{

cout << "\t"; // Khoang trang phia tren hang 1 va ben trai ki tu A

for (char i = 'A'; i <= 'F'; i++)

{

cout << i << "\t"; // chay ky tu chu cai tu A ===> F

}

cout << endl;

for (int i = 0; i < hang; i++) // chay dong

{

cout << "Hang " << i + 1 << "\t";

for (int j = 0; j < cot; j++)

{

cout << NhapMang[i][j] << "\t";

}

cout << endl;

}

}

void BangDatVe(char NhapMang[][MAX],int hang, int cot, int hangchon, int cotchon)

{

if (NhapMang[hangchon - 1][cotchon - 1] == '\*') // neu mang a[i][j] = \* thi gan lai = X

{

NhapMang[hangchon - 1][cotchon - 1] = 'X'; // -1 de xu ly giao dien nguoi dung

cout << "\nBan da dat ve thanh cong. Xin kiem tra lai vi tri ban dat!\n";

cout << "Neu khong chinh xac vui long lien he bo phan cham soc khach hang cua chung toi theo so: 0962741977\n";

cout << "Xin chan thanh cam on quy khach.\n";

XuatMang(NhapMang, hang, cot); // xuat lai mang cho nguoi dung kiem tra vi tri minh dat

}

else

{

cout << "\nHien tai vi tri ban chon da co nguoi dat, xin chon ghe khac";

}

}

void menu(char NhapMang[][MAX], int hang, int cot)

{

int chon = 0;

int chonhang = 0, choncot = 0;

do {

cout << "\n---------Ban hay nhap vao loai ve-----------";

cout << "\n----------1.Thuong gia----------------------";

cout << "\n----------2.Pho thong-----------------------";

cout << "\n----------3.Tiet kiem-----------------------";

cout << "\nLua chon cua ban: ";

cin >> chon;

if (chon <= 0 || chon > 3)

{

cout << "\nBan chon sai hay kiem tra lai!";

}

else

{

cout << "\nThong tin ghe tren may bay nhu sau: ";

cout << "\nMay bay co 13 hang va moi hang co 6 ghe";

cout << "\nBang dat ve hien tai nhu sau ( \*: cho con trong- X: cho da dat):\n";

XuatMang(NhapMang, hang, cot);

switch (chon)

{

case 1:

{

do {

cout << "\nBan chon loai ve la thuong gia va ban hay chon vi tri ghe nam trong hang 1 va hang 2: ";

cout << "\nHang: ";

cin >> chonhang;

cout << "\nGhe: ";

cin >> choncot;

if ((chonhang <= 0 || chonhang > 2) || (choncot <= 0 || choncot > 6))

{

cout << "\nBan nhap sai ghe xin xem lai thong tin!";

}

else

{

BangDatVe(NhapMang, hang, cot, chonhang, choncot);

}

} while ((chonhang <= 0 || chonhang > 2) || (choncot <= 0 || choncot > 6));

break;

}

case 2: {

do {

cout << "\nBan chon loai ve la pho thong va ban hay chon vi tri ghe nam trong hang 3 den hang 7: ";

cout << "\nHang: ";

cin >> chonhang;

cout << "\nGhe: ";

cin >> choncot;

if ((chonhang < 3 || chonhang > 7) || (choncot <= 0 || choncot > 6))

{

cout << "\nBan nhap sai ghe xin xem lai thong tin!";

}

else

{

BangDatVe(NhapMang, hang, cot, chonhang, choncot);

}

} while ((chonhang < 3 || chonhang > 7) || (choncot <= 0 || choncot > 6));

break;

}

case 3: {

do {

cout << "\nBan chon loai ve la tiet kiem va ban hay chon vi tri ghe nam trong hang 8 den hang 13: ";

cout << "\nHang: ";

cin >> chonhang;

cout << "\nGhe: ";

cin >> choncot;

if ((chonhang < 8 || chonhang > 13) || (choncot <= 0 || choncot > 6))

{

cout << "\nBan nhap sai ghe xin xem lai thong tin!";

}

else

{

BangDatVe(NhapMang, hang, cot, chonhang, choncot);

}

} while (chonhang < 8 || chonhang > 13 || choncot <= 0 || choncot > 6);

break;

}

}

}

} while (chon <= 0 || chon > 3);

}