Battleship

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CSC5
Spring 2017
44188

Intro:

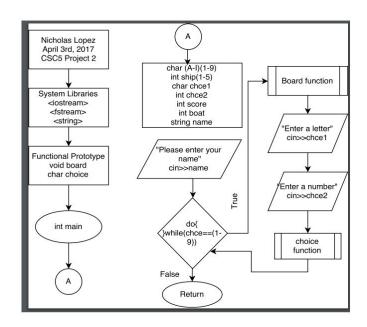
Battleship is a two player game that was created during World War 1 and originally was a game played with a paper and pencil. Today generally people use game boards to play the game or play it electronically. Battleship to me is fun because of the challenge that comes along with it because the targets' random locations. I chose this game because I thought it could be fun and had much potential to it. For my version I chose to make it single player however.

How to Play:

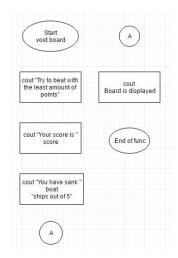
The goal to achieve in my imagining of Battleship is to finish with the least amount of points possible. The board has 81 preset spaces in which there could be a ship located. Each time you hit a wrong space you gain a point, however if you hit a space where a ship is located, you do not gain a point! When the game starts it shall ask you for your name to go onto the leaderboard in the end, and then the game will begin. Next you have to choose a letter (A-I) and then a number (1-9). Once you have done that, the space you have chosen will change to let you know if you have missed (-) or hit (X) a target in that space. Now I knew that somebody would decide to put some other letter like K or something, so if you do some madness like that, the program will give you sass and give you a point anyways for messing with it. And if you repeat a space, it will simply just repeat that it was a miss or not and give you another point or not.

Flowchart:

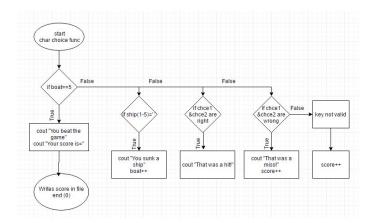
Main:



Board func:



Choice func:



Code used:

```
/*
```

* File: main.cpp

* Author: Nicholas Lopez

* Created on April 3rd, 2017, 10:30 AM

* Purpose: Battleship Project 2 Version 5

*/

//System Libraries Here

#include <iostream>

#include <fstream> //Reading and opening files

#include <string>

using namespace std;

```
//Function Prototypes Here
char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&,char&,char&,char&,char&,char&,
   char&,char&,char&);
char);
//Program Execution Begins Here
int main() {
 //Declare all Variables Here
 char A1='O',A2='O',A3='O',A4='O',A5='O',A6='O',A7='O',A8='O',A9='O'; //All the spaces
 char B1='O',B2='O',B3='O',B4='O',B5='O',B6='O',B7='O',B8='O',B9='O';
 char C1='O',C2='O',C3='O',C4='O',C5='O',C6='O',C7='O',C8='O',C9='O';
```

char D1='O',D2='O',D3='O',D4='O',D5='O',D6='O',D7='O',D8='O',D9='O';

char E1='O',E2='O',E3='O',E4='O',E5='O',E6='O',E7='O',E8='O',E9='O';

char F1='O',F2='O',F3='O',F4='O',F5='O',F6='O',F7='O',F8='O',F9='O';

char G1='O',G2='O',G3='O',G4='O',G5='O',G6='O',G7='O',G8='O',G9='O';

```
char H1='O',H2='O',H3='O',H4='O',H5='O',H6='O',H7='O',H8='O',H9='O';
char I1='O',I2='O',I3='O',I4='O',I5='O',I6='O',I7='O',I8='O',I9='O';
int ship1=0,ship2=0,ship3=0,ship4=0,ship5=0; //Each ship which adds up
const int SIZE=10;
                                  //size of scoreboard
char chce1;
                               //character choice
int chce2;
                              //integer choice
int score=0;
                              //amount of moves made, each equal one point
int boat=0;
                              //amount of boats sunk
string name;
                               //Name for leader boards
//Input or initialize values Here
cout<<"Please enter your name ";</pre>
  cin>>name;
  cout<<endl;
do{
board(chce1, chce2, score, boat, A1, A2, A3, A4, A5, A6, A7, A8, A9, B1, B2, B3, B4, B5, B6, B7, B8,
   B9,C1,C2,C3,C4,C5,C6,C7,C8,C9,D1,D2,D3,D4,D5,D6,D7,D8,D9,
   E1,E2,E3,E4,E5,E6,E7,E8,E9,F1,F2,F3,F4,F5,F6,F7,F8,F9,
   G1,G2,G3,G4,G5,G6,G7,G8,G9,H1,H2,H3,H4,H5,H6,H7,H8,H9,
   I1,I2,I3,I4,I5,I6,I7,I8,I9);
cout<<"Pick a letter"<<endl;
cin>>chce1;
cout<<endl;
cout<<"Now pick a Number"<<endl;</pre>
cin>>chce2;
cout<<endl;
```

choice (chce1, chce2, name, SIZE, score, boat, ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, ship4, ship5, A1, A2, A3, and based on the ship1, ship2, ship3, ship4, s

```
A4,A5,A6,A7,A8,A9,B1,B2,B3,B4,B5,B6,B7,B8,B9,C1,C2,C3,C4,C5,C6,
     C7,C8,C9,D1,D2,D3,D4,D5,D6,D7,D8,D9,E1,E2,E3,E4,E5,E6,E7,E8,E9,
     F1,F2,F3,F4,F5,F6,F7,F8,F9,G1,G2,G3,G4,G5,G6,G7,G8,G9,H1,H2,H3,
     H4,H5,H6,H7,H8,H9,I1,I2,I3,I4,I5,I6,I7,I8,I9);
 //Process/Calculations Here
 //Output Located Here
 //Exit
 return 0;
void board(char chce1, int chce2, int &score, int &boat, char A1, char A2, char A3, char A4, char A5,
     char A6,char A7,char A8,char A9,char B1,char B2,char B3,char B4,char B5,
     char B6,char B7,char B8,char B9,char C1,char C2,char C3,char C4,char C5,
     char C6,char C7,char C8,char C9,char D1,char D2,char D3,char D4,char D5,
     char D6,char D7,char D8,char D9,char E1,char E2,char E3,char E4,char E5,
     char E6,char E7,char E8,char E9,char F1,char F2,char F3,char F4,char F5,
     char F6,char F7,char F8,char F9,char G1,char G2,char G3,char G4,char G5,
     char G6,char G7,char G8,char G9,char H1,char H2,char H3,char H4,char H5,
     char H6,char H7,char H8,char H9,char I1,char I2,char I3,char I4,char I5,
     char I6,char I7,char I8,char I9){
  cout<<"Try to beat the game of Battleship with the least"<<endl;</pre>
  cout<<"amount of points!!"<<endl;</pre>
  cout<<"Your score is = "<<score<<endl;</pre>
```

```
cout<<"You have sunk "<<boat<<" ships out of 5"<<endl<<endl;
                cout<<" A B C D E F G H I "<<endl;
              cout<<"1 "<<1<<" "<<1<<" "<<1<<" "<<1<<" "<<1!<" "<<1!<<" "<<1!<<" "<<1!<<" "<<1!<<" "<<1!<<" "<<1!</td>
 "<<endl;
              cout<"2 "<<42<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" "<<62<<" " "<<62<<" " |
"<<endl;
              "<<endl;
              cout<"4 "<<44<" "<64<" "<<64<" "<<64<" "<<64<" "<<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<64<" "<6
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              cout<"5 "<<45<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55<" "<55
 "<<endl;
              "<<endl;
              cout<"7 "<<A7<" "<<B7<" "<<D7<" "<<E7<" "<<F7<" "<<F7<" "<<F7<" "<<F7<" "<<F7<" "<<F7<<| Table | Table
 "<<endl;
              cout<"8 "<<48<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58<<" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" "<58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58</" ><58<
"<<endl;
                cout<<"9 "<<49<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<<" "<<69<</1></1></1></1></1></1></1></1></1>Continues
 "<<endl;
```

char choice(char chce1, int chce2, string &name, int SIZE, int &score, int &boat, int &ship1, int &ship2, int &ship3,

```
int &ship4,int &ship5, char &A1,char &A2,char &A3,char &A4,char &A5,char &A6, char &A7,char &A8,char &A9,char &B1,char &B2,char &B3,char &B4,char &B5,char &B6, char &B7,char &B8,char &B9,char &C1,char &C2,char &C3,char &C4,char &C5,char &C6, char &C7,char &C8,char &C9,char &D1,char &D2,char &D3,char &D4,char &D5,char &D6, char &D7,char &D8,char &D9,char &E1,char &E2,char &E3,char &E4,char &E5,char &E6, char &E7,char &E8,char &E9,char &F1,char &F2,char &F3,char &F4,char &F5,char &F6, char &F7,char &F8,char &F9,char &G1,char &G2,char &G3,char &G4,char &G5,char &G6, char &G7,char &G8,char &G9,char &H1,char &H2,char &H3,char &H4,char &H5,char &H6, char &H7,char &H8,char &H9,char &I1,char &I2,char &I3,char &I4,char &I5,char &I6, char &I7,char &I8,char &I9) {
```

```
if(boat==5){
    cout<<"YOU HAVE COMPLETED THE GAME!!"<<endl;
    ofstream outputFile;
    cout<<"Your final score was = "<<score-2<<endl;
    outputFile.open("score.dat");
    outputFile<<name<<" has a score of = "<<score-2<<endl;
    //closing file
    outputFile.close();
    cout<<"Yeet"<<endl;
    exit(0);
}

if ((ship1==5)&&(!(ship1>5))){
    boat=+1;
    cout<<"You have sunk a ship!!"<<endl;
}

if (ship2==3){
    boat=+1;
</pre>
```

```
cout<<"You have sunk a ship!!"<<endl;</pre>
 if (ship3==2){
            boat=+1;
             cout<<"You have sunk a ship!!"<<endl;</pre>
if (ship4==3){
            boat=+1;
            cout<<"You have sunk a ship!!"<<endl;</pre>
if (ship 5 == 4){}
            boat=+1;
            cout<<"You have sunk a ship!!"<<endl;</pre>
if (((ship1==5)&&(ship2==3))||((ship1==5)&&(ship3==2))||
                         ((ship1==5)&&(ship4==3))||((ship1==5)&&(ship5==4))){
             boat=+2;
if (((ship1==5)&&(ship2==3)&&(ship3==2))||((ship1==5)&&(ship2==3)&&(ship4==3))||
                         ((ship1==5)&&(ship2==3)&&(ship5==4))||((ship4==3)&&(ship2==3)&&(ship3==2))||
                         ((ship5==4)&&(ship2==3)&&(ship3==2))||((ship1==5)&&(ship3==2)&&(ship4==3))||
                         ((ship1==5)&&(ship5==4)&&(ship3==2))||((ship5==4)&&(ship4==3)&&(ship3==2))){
             boat=+3;
if (((ship1==5)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&\&(ship3==2)\&(ship3==2)\&\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(ship3==2)\&(
                         ((ship5==4) \& \& (ship2==3) \& \& (ship3==2) \& \& (ship4==3)) || ((ship1==5) \& \& (ship5==4) \& \& (ship3==2) \& \& (ship4==3))|| ((ship1==5) \& \& (ship2==4) \& \& (ship3==2) \& \& (ship4==3))|| ((ship1==5) \& \& (ship2==4) \& \& (ship2==2) \& \& (ship3==2) \& \& (ship4==3))|| ((ship1==5) \& \& (ship2==4) \& \& (ship3==2) \& \& (ship4==3))|| ((ship1==5) \& \& (ship3==2) \& \& (ship3==2) \& \& (ship4==3))|| ((ship1==5) \& \& (ship3==2) \& \& (ship3==2) \& \& (ship4==3))|| ((ship1==5) \& \& (ship3==2) \& \& (s
                         ((ship1==5)&&(ship2==3)&&(ship5==4)&&(ship4==3))){
             boat=+4;
```

```
if ((ship1==5)&&(ship2==3)&&(ship3==2)&&(ship4==3)&&(ship5==4)){
  boat=+5;
//Right answers
if((chce1=='C'\&\&chce2==1)||(chce1=='c'\&\&chce2==1))\{
  C1 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship1++;
if ((chce1=='D'&&chce2==1)||(chce1=='d'&&chce2==1)){
  D1 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship1++;
if((chce1=='E'\&\&chce2==1)||(chce1=='e'\&\&chce2==1))\{
  E1 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship1++;
if((chce1=='F'\&\&chce2==1)||(chce1=='f'\&\&chce2==1))\{
  F1 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship1++;
if((chce1=='G'\&\&chce2==1)||(chce1=='g'\&\&chce2==1))\{
  G1 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship1++;
```

```
}
if ((chce1=='B'&&chce2==2)||(chce1=='b'&&chce2==2)){
  B2 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship2++;
if ((chce1=='B'&&chce2==3)||(chce1=='b'&&chce2==3)){
  B3 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship2++;
if ((chce1=='E'&&chce2==3)||(chce1=='e'&&chce2==3)){
  E3 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship3++;
if((chce1=='B'\&\&chce2==4)||(chce1=='b'\&\&chce2==4))\{
  B4 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship2++;
if ((chce1=='E'&&chce2==4)||(chce1=='e'&&chce2==4)){
  E4 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship3++;
if ((chce1 == 'I' \& \& chce2 == 6) || (chce1 == 'i' \& \& chce2 == 6)) \{
  16 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
```

```
ship4++;
if ((chce1=='I'&&chce2==7)||(chce1=='i'&&chce2==7)){
  I7 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship4++;
if ((chce1 == 'I' \& \& chce2 == 8) || (chce1 == 'i' \& \& chce2 == 8)) \{
  18 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship4++;
if((chce1=='B'\&\&chce2==9)||(chce1=='b'\&\&chce2==9))\{
  B9 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship5++;
if((chce1=='C'\&\&chce2==9)||(chce1=='c'\&\&chce2==9))\{
  C9 = 'X';
  cout<<"That was a Hit!!"<<endl;
  ship5++;
if ((chce1=='D'&&chce2==9)||(chce1=='d'&&chce2==9)){
  D9 = 'X';
  cout<<"That was a Hit!!"<<endl;</pre>
  ship5++;
if((chce1=='E'\&\&chce2==9)||(chce1=='e'\&\&chce2==9))\{
  E9 = 'X';
```

```
cout<<"That was a Hit!!"<<endl;
  ship5++;
//wrong answers
//A column
if ((chce1=='A'&&chce2==1)||(chce1=='a'&&chce2==1)){
  A1 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='A'\&\&chce2==2)||(chce1=='a'\&\&chce2==2))\{
  A2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='A'&&chce2==3)||(chce1=='a'&&chce2==3)){
  A3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='A'&&chce2==4)||(chce1=='a'&&chce2==4)){
  A4 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='A'&&chce2==5)||(chce1=='a'&&chce2==5)){
  A5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
```

```
score++;
if ((chce1=='A'&&chce2==6)||(chce1=='a'&&chce2==6)){
  A6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='A'&&chce2==7)||(chce1=='a'&&chce2==7)){
  A7 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='A'&&chce2==8)||(chce1=='a'&&chce2==8)){
  A8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='A'&&chce2==9)||(chce1=='a'&&chce2==9)){
  A9 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//B column
if \ ((chce1 == 'B' \& \& chce2 == 1) || (chce1 == 'b' \& \& chce2 == 1)) \{
  B1 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='B'&&chce2==5)||(chce1=='b'&&chce2==5)){
```

```
B5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='B'\&\&chce2==6)||(chce1=='b'\&\&chce2==6))\{
  B6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='B'&&chce2==7)||(chce1=='b'&&chce2==7)){
  B7 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='B'&&chce2==8)||(chce1=='b'&&chce2==8)){
  B8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//C column
if((chce1=='C'\&\&chce2==2)||(chce1=='c'\&\&chce2==2))\{
  C2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='C'&&chce2==3)||(chce1=='c'&&chce2==3)){
  C3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
```

```
}
if ((chce1=='C'&&chce2==4)||(chce1=='c'&&chce2==4)){
  C4 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='C'&&chce2==5)||(chce1=='c'&&chce2==5)){
  C5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='C'&&chce2==6)||(chce1=='c'&&chce2==6)){
  C6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='C'&&chce2==7)||(chce1=='c'&&chce2==7)){
  C7 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='C'&&chce2==8)||(chce1=='c'&&chce2==8)){
  C8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//D column
if((chce1=='D'\&\&chce2==2)||(chce1=='d'\&\&chce2==2))\{
  D2 = '-';
```

```
cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='D'\&\&chce2==3)||(chce1=='d'\&\&chce2==3))\{
  D3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='D'&&chce2==4)||(chce1=='d'&&chce2==4)){
  D4 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='D'&&chce2==5)){(chce1=='d'&&chce2==5)){
  D5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='D'&&chce2==6))|(chce1=='d'&&chce2==6)){
  D6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='D'&&chce2==7)||(chce1=='d'&&chce2==7)){
  D7 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='D'\&\&chce2==8)||(chce1=='d'\&\&chce2==8))\{
```

```
D8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//E column
if((chce1=='E'\&\&chce2==2)||(chce1=='e'\&\&chce2==2))\{
  E2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='E'&&chce2==5)||(chce1=='e'&&chce2==5)){
  E5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='E'&&chce2==6)||(chce1=='e'&&chce2==6)){
  E6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='E'&&chce2==7)||(chce1=='e'&&chce2==7)){
  E7 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='E'&&chce2==8)||(chce1=='e'&&chce2==8)){
  E8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
```

```
}
//F column
if ((chce1=='F'&&chce2==2))(chce1=='f'&&chce2==2)){
  F2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='F'\&\&chce2==3)||(chce1=='f'\&\&chce2==3))\{
  F3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='F'\&\&chce2==4)||(chce1=='f'\&\&chce2==4))\{
  F4 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='F'&&chce2==5))|(chce1=='f'&&chce2==5)){
  F5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='F'&&chce2==6))(chce1=='f'&&chce2==6)){
  F6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='F'\&\&chce2==7))(chce1=='f'\&\&chce2==7))\{
  F7 = '-';
```

```
cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='F'\&\&chce2==8)||(chce1=='f'\&\&chce2==8))\{
  F8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='F'\&\&chce2==9))(chce1=='f'\&\&chce2==9))\{
  F9 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//G column
if ((chce1=='G'&&chce2==2)||(chce1=='g'&&chce2==2)){
  G2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='G'\&\&chce2==3)||(chce1=='g'\&\&chce2==3))\{
  G3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='G'&&chce2==4)||(chce1=='g'&&chce2==4)){
  G4 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
```

```
if ((chce1=='G'&&chce2==5)){(chce1=='g'&&chce2==5)){
  G5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='G'\&\&chce2==6))((chce1=='g'\&\&chce2==6))\{
  G6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='G'&&chce2==7)||(chce1=='g'&&chce2==7)){
  G7 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='G'\&\&chce2==8)||(chce1=='g'\&\&chce2==8))\{
  G8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='G'\&\&chce2==9)||(chce1=='g'\&\&chce2==9))\{
  G9 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//H column
if((chce1=='H'\&\&chce2==1)||(chce1=='h'\&\&chce2==1))\{
  H1 = '-';
  cout<<"You have missed!!"<<endl;</pre>
```

```
score++;
if ((chce1=='H'&&chce2==2)||(chce1=='h'&&chce2==2)){
  H2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='H'&&chce2==3)||(chce1=='h'&&chce2==3)){
  H3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='H'&&chce2==4)||(chce1=='h'&&chce2==4)){
  H4 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='H'&&chce2==5)||(chce1=='h'&&chce2==5)){
  H5 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='H'&&chce2==6)){(chce1=='h'&&chce2==6)){
  H6 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='H'&&chce2==7)){(chce1=='h'&&chce2==7)){
  H7 = '-';
```

```
cout<<"You have missed!!"<<endl;</pre>
  score++;
if((chce1=='H'\&\&chce2==8)||(chce1=='h'\&\&chce2==8))\{
  H8 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='H'&&chce2==9)||(chce1=='h'&&chce2==9)){
  H9 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
//I column
if ((chce1=='I'&&chce2==1)||(chce1=='i'&&chce2==1)){
  I1 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1 == 'I' \& \& chce2 == 2) || (chce1 == 'i' \& \& chce2 == 2)) \{
  I2 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
if ((chce1=='I'&&chce2==3)||(chce1=='i'&&chce2==3)){
  I3 = '-';
  cout<<"You have missed!!"<<endl;</pre>
  score++;
```

```
if ((chce1=='I'&&chce2==4)||(chce1=='i'&&chce2==4)){
                 I4 = '-';
                   cout<<"You have missed!!"<<endl;</pre>
                  score++;
         if((chce1=='I'\&\&chce2==5)||(chce1=='i'\&\&chce2==5))\{
                 I5 = '-';
                  cout<<"You have missed!!"<<endl;</pre>
                  score++;
         if ((chce1=='I'&&chce2==9)||(chce1=='i'&&chce2==9)){
                  19 = '-';
                  cout<<"You have missed!!"<<endl;</pre>
                  score++;
         else
if(!(chce1=='A'||chce1=='B'||chce1=='C'||chce1=='D'||chce1=='E'||chce1=='F'||chce1=='G'||chce1=='H'||chce1=='I'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'||chce1=='B'|
|a'||chce1==|b'||chce1==|c'||chce1==|a'||chce1==|e'||chce1==|f'||chce1==|g'||chce1==|h'||chce1==|i')
                  cout<<"Not a valid input"<<endl;</pre>
                   cout<<"I'm still giving you a point for that"<<endl;</pre>
                  score++;
```