

```

#include <iostream>

#include <fstream>

#include <string>

#include <sstream>


using namespace std;


int main()
{
    //declare constants
    string line;
    int MSize = 512; //matrix size
    cout << "Writing random matrix1 values" << endl;
    ofstream matrix1Write;
    matrix1Write.open("matrix1.txt");
    matrix1Write << to_string(MSize) << endl;
    int sign;
    for(int i=0; i<MSize; i++){
        for(int j=0; j<MSize; j++){
            sign = rand() % 2;
            if(sign==0){
                matrix1Write << to_string(rand() % 11 + (-10)) << ',';
            }
            else if (sign==1){
                matrix1Write << to_string(rand() % 11) << ',';
            }
            else{
                cout << "if statment broke" << endl;
                break;
            }
        }
    }
}

```

```

    }
}
matrix1Write << endl;
}
matrix1Write.close();

cout << "Writing random matrix2 values" << endl;
ofstream matrix2Write;
matrix2Write.open("matrix2.txt");
matrix2Write << to_string(MSize) << endl;
for(int i=0; i<MSize; i++){
    for(int j=0; j<MSize; j++){
        sign = rand() % 2;
        if(sign==0){
            matrix2Write << to_string(rand() % 11 + (-10)) <<',';
        }
        else if (sign==1){
            matrix2Write << to_string(rand() % 11) <<',';
        }
        else{
            cout << "if statment broke" << endl;
            break;
        }
    }
}
matrix2Write << endl;
}
matrix2Write.close();
return 0;
}

```

