**ADS LAB TEST 2**

PROGRAM NUMBER 2:

Given a sequence of strings, write a program to find out the second most repeated/frequently

occurring string in the given sequence. Consider that no two words are the second most

repeated, there will be always a single word. Use hashing for implementation.

Examples:

Input : {"aaa", "bbb", "ccc", "bbb",

"aaa", "aaa"}

Output : bbb

#include <bits/stdc++.h>

using namespace std;

string stringWithSecondHighestFrequency(vector<string> &A)

{

    unordered\_map<string, int> hash\_table;

 for (int i = 0; i < A.size(); i++)

    {

        hash\_table[A[i]]++;

    }

    int max\_freq = 0;

    int second\_highest\_freq = 0;

    for (auto ele : hash\_table)

    {

        max\_freq = max(max\_freq, ele.second);

        if (second\_highest\_freq < ele.second && ele.second < max\_freq)

        {

            second\_highest\_freq = ele.second;

        }

    }

    for (auto ele : hash\_table)

    {

        if (ele.second == second\_highest\_freq)

        {

            return ele.first;

        }

    }

}

int main()

{

    vector<string> A = {"aaa", "bbb", "ccc", "bbb","aaa", "aaa"};

    cout << "String with second highest frequency is: " << stringWithSecondHighestFrequency(A) << endl;

    return 0;

}

OUTPUT



