System Software (CS306)

Assignment - 3

U20CS135

1. Write a C program to recognize strings under 'a*', 'a*b+'.

```cpp
#include<bits/stdc++.h>

using namespace std;
void jaiishriram(string s)
{
  map<char,int>m;
    int n=s.length();
    for(int i=0;i<n;i++)
    {
        m[s[i]]++;
    }
    if(m['a']==n)
    {
        cout<<"String Recognized and it is a*"<<endl;
        return;
    }
    else if(m.size()<=2)
    {
        string k=s;
        sort(k.begin(),k.end());
        if(k==s)
        {
            cout<<"String Recognized and it is a*b+"<<endl;
            return;
        }
    }
    cout<<"String not Recognized"<<endl;
}
int main()
{
    string s;
    cin>>s;
    jaiishriram(s);
}
```

```
    return 0;
}
```

```
SHIVAM@LAPTOP-6H150TV6 MINGW64 ~/OneDrive/Desktop/CourseWork/SS/Practicals/Lab Assignment 3
$ ./1
aabb
String Recognized and it is a*b+

SHIVAM@LAPTOP-6H150TV6 MINGW64 ~/OneDrive/Desktop/CourseWork/SS/Practicals/Lab Assignment 3
$ ./1
aaaaaaaaaaaaaaaa
String Recognized and it is a*

SHIVAM@LAPTOP-6H150TV6 MINGW64 ~/OneDrive/Desktop/CourseWork/SS/Practicals/Lab Assignment 3
$ ./1
abaabba
String not Recognized
```

SUBMITTED BY:

U20CS135

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