



Experiment: - 10

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Semester: 5th

Subject Name: Competitive Coding (20CSP-314)

1. Marc's Cakewalk

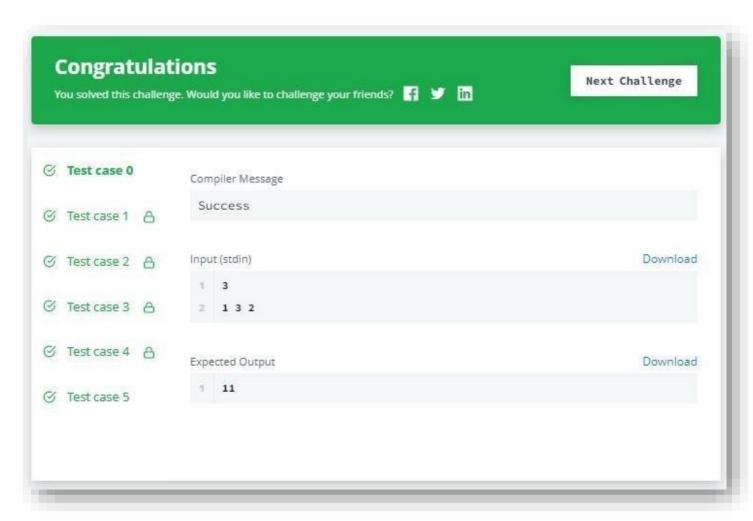
Program Code:

```
#include <bits/stdc++.h> using
namespace std;
#define rep(i,n) for(int (i)=0;(i)<(int)(n);++(i))
#define rer(i,l,u) for(int (i)=(int)(l);(i)<=(int)(u);++(i))
#define reu(i,l,u) for(int (i)=(int)(l);(i)<(int)(u);++(i))
static const int INF = 0x3f3f3f3f; static const
long long INFL = 0x3f3f3f3f3f3f3f3f3f1L;
typedef vector<int>
                        vi; typedef
pair<int, int> pii; typedef
vector<pair<int, int> > vpii;
typedef long long ll;
 template<typename T, typename U> static
void amin(T &x, U y) {
                            if (y < x) x
       } template<typename T, typename</pre>
U> static void amax(T &x, U y) {
(x < y) x
= y; }
int main(void) {
                    int n;
while (~scanf("%d", &n)) {
vector<int> c(n);
                          for (int
i = 0; i < n; ++ i)
scanf("%d", &c[i]);
sort(c.begin(), c.end());
        11 \text{ ans} = 0;
                            rep(i, n)
ans += (ll)c[i] << (n - 1 - i);
printf("%lld\n", ans);
    }
}
```





Output:



2. Grid

Challenge

Program Code:

#include <bits/stdc++.h> using
namespace std;







```
typedef long long 11;
typedef pair<int, int> Pii; typedef pair<ll,</pre>
11> P11;
#define _USE_MATH_DEFINES
#define _CRT_SECURE_NO_DEPRECATE
#define FOR(i,n) for(int i = 0; i < (n); i++)
#define sz(c) ((int)(c).size()) #define
ten(x) ((int)1e##x) #define tenll(x)
((ll)1e##x)
template<class T> T gcd(T a, T b) { return b ? gcd(b, a % b) : a; } void
solve(){ int n; cin >> n; vector<string> v(n);
    FOR(i, n) cin >> v[i];
    FOR(i, n) sort(v[i].begin(), v[i].end());
    bool b = true;
FOR(i, n){
                  string
х;
       FOR(j, n) x.push_back(v[j][i]); string
             sort(y.begin(),
y = x;
y.end());
                 if (x != y) {
                                           b
= false;
        }
      puts(b ? "YES" :
"NO"); }
int main(void){
int t; cin >>
t; while
(t--) {
solve();
             }
     }
```

Output:





