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VERNAM CIPHER

```cpp
#include<bits/stdc++.h>
using namespace std;
int main(){
    int t,n,i,j,k,sum=0;
    string m;
    cout<<"Enter the message"<<'\n';
    cin>>m;
    string key;
    cout<<"Enter the key"<<'\n';
    cin>>key;
    int mod = key.size();
    j=0;
    for(i=key.size();i<m.size();i++){
        key+=key[j%mod];
        j++;
    }
    string ans="";
    for(i=0;i<m.size();i++){
        ans += (key[i]-'A'+m[i]-'A')%26+'A';
    }
    cout<<"Encrypted message: "<<ans<<'\n';

    return 0;
}
using namespace std;
int main(){
    int i,j,k,n;
    vector<vector<char> > a(26,vector<char>(26));
    k=0;
    n=26;
    for(i=0;i<n;i++){
        k=i;
        for(j=0;j<n;j++){
            a[i][j]='A'+k;
            k++;
            if(k==26) k=0;
        }
    }
    cout<<"Enter the encrypted message\n";
    string s;
    cin>>s;
```

```cpp
        cout<<"Enter the key\n";
        string key;
        cin>>key;
        k=0;
        for(i=key.size();i<s.size();i++){
            key+=key[k];
            k++;
        }
        string decrypt;
        for(i=0;i<s.size();i++){
            for(j=0;j<n;j++){
                if(a[j][key[i]-'A']==s[i]){
                    decrypt += 'A'+j;
                    break;
                }
            }
        }
        cout<<"Decrypted message: "<<decrypt<<'\n';
        return 0;
}
```