**Information Security**

* **Practical-5: Hill cipher**

**CODE:**

#include<iostream>

#include<vector>

using namespace std;

int main(){

int x,y,i,j,k,n;

cout<<"Enter the size of key matrix :\n";

cin>>n;

cout<<"Enter the key matrix: \n";

int a[n][n];

for(i=0;i<n;i++){

for(j=0;j<n;j++){

cin>>a[i][j];

}

}

cout<<"Enter the message to encrypt: \n";

string s;

cin>>s;

int temp = (n-s.size()%n)%n;

for(i=0;i<temp;i++){

s+='x';

}

k=0;

string ans="";

while(k<s.size()){

for(i=0;i<n;i++){

int sum = 0;

int temp = k;

for(j=0;j<n;j++){

sum += (a[i][j]%26\*(s[temp++]-'a')%26)%26;

sum = sum%26;

}

ans+=(sum+'a');

}

k+=n;

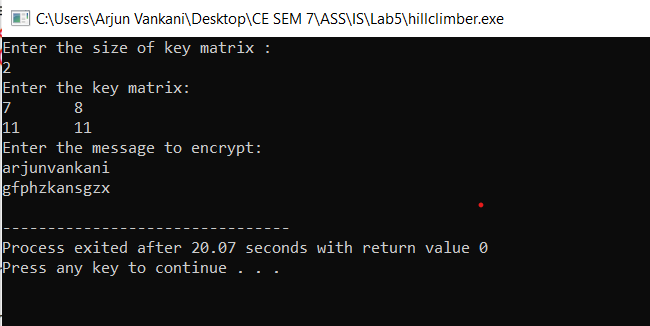
}

cout<<ans<<'\n';

return 0;

}

**Output:**

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