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Batch: - M7

Code:-

```cpp
///Transposition cipher:///
#include<iostream>
#include<string>
using namespace std;

int main()
{
	string key;
	int key_size;
	cout<<"Enter the key"<<endl;
	getline(cin,key);
	key_size=key.length();
	char keyer[key_size];
	string message;
	cout<<"enter the message"<<endl;
	getline(cin,message);
	int messagesize=message.length();
	int n=0,arrheight=0;
	string rand="asfgaikhgahklahjsga";
	while(n<messagesize)
	{
		n=n+key_size;
		arrheight++;
	}
```

```cpp
//cout<<arrheight<<endl;

//cout<<key_size<<endl;

string base;

if(n!=messagesize)

{

        message.append(base.assign(rand,0,n-messagesize));

}

string enco[arrheight];

n=0;

for(int i=0;i<arrheight;i++)

{

        for(int j=0;j<key_size;j++)

        {

                enco[i]=enco[i]+message.at(n);

                //cout<<message.at(n);


n++;

        }

        cout<<endl;

    }

    int arr_of_cipher[key_size];

    char arr_of_char[key_size];

    for(int i=0;i<key_size;i++)

    {

        arr_of_cipher[i]=(int)key.at(i);

        arr_of_char[i]=key.at(i);

    }

    for(int i=0;i<key_size;i++)

    {
```

```cpp
        for(int j=0;j<key_size-1;j++)

        {

                if(arr_of_cipher[j]>arr_of_cipher[j+1])

                {

                        int temp=arr_of_cipher[j];

                        arr_of_cipher[j]=arr_of_cipher[j+1];

                        arr_of_cipher[j+1]=temp;

                        char emp=arr_of_char[j];

                        arr_of_char[j]=arr_of_char[j+1];

                        arr_of_char[j+1]=emp;

                }

        }

}

string encrypted_message="";

n=0;

for(int i=0;i<key_size;i++)

{

        for(int j=0;j<key_size;j++)

        {

                if(key.at(j)==arr_of_char[i])

                {

                        for(int k=0;k<arrheight;k++)

                        {

                                encrypted_message=encrypted_message+enco[k].at(j);

                        }

                }

        }

}

cout<<"Encrypted message \n"<<encrypted_message<<endl;
```

}

Output:-

```
PS C:\Users\gupta\OneDrive\Documents\NS> cd "c:\Users\gupta\
pCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter the key
pict
enter the message
experiment


Encrypted message
pmaxiternees
```