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Batch: - M7

Code:-

```
//Decryption of transposition cypher:

#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 encrypted message"<<endl;
	getline(cin,message);
	int messagesize=message.length();
	int n=0,arrheight=0;
	while(n<messagesize)
	{
		n=n+key_size;
		arrheight++;
	}
```

```
string enco[key_size];
n=0;
for(int i=0;i<key_size;i++)
{
	for(int j=0;j<arrheight;j++)
	{
		enco[i]=enco[i]+message.at(n);
		//piccout<<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++)
{
	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 decrypt[key_size];
        n=0;
        for(int i=0;i<key_size;i++)
        {
            for(int j=0;j<key_size;j++)
            {
                if(key.at(i)==arr_of_char[j])
                {
                    decrypt[i]=enco[j];
                }
            }
        }
        string decrypted_key="";
        for(int i=0;i<arrheight;i++)
        {
            for(int j=0;j<key_size;j++)
            {
                decrypted_key=decrypted_key+decrypt[j].at(i);
            }
        }
        cout<<"Decrypted key:\n"<<decrypted_key<<endl;
}
```

Output:-

```
PS C:\Users\gupta\OneDrive\Documents\NS> cd "c:\Users\gupt
 ($?) { .\exptT_D }
Enter the key
pict
enter the encrypted message
pmaxiternees



Decrypted key:
experimentas
```