

DATE:23/11/2023

PROGRAM-22

AIM: Write a program to illustrate how Template function can be overloaded.

CODE:

```
#include <iostream>
using namespace std;
template <typename T>
void swapItems(T &a, T &b) {
    T temp = a;
    a = b;
    b = temp;
}
template <typename T, size_t N>
void swapItems(T (&arr1)[N], T (&arr2)[N]) {
    for (size_t i = 0; i < N; ++i) {
        swapItems(arr1[i], arr2[i]);
    }
}
int main() {
    int int1 = 5, int2 = 10;
    float float1 = 3.5, float2 = 7.2;
    char char1 = 'A', char2 = 'B';
    swapItems(int1, int2);
    swapItems(float1, float2);
    swapItems(char1, char2);
    cout << "Swapped integers: " << int1 << " " << int2 << endl;
    cout << "Swapped floats: " << float1 << " " << float2 << endl;
    cout << "Swapped characters: " << char1 << " " << char2 << endl;

    return 0; }
```