

Different Output Results:

```
#include <string>
#include "MapLoader.h"
#include "Map.h"

using namespace std;

int main() {
```

Case1:

```
MapLoader* m = new MapLoader("../artic.map");
cout << *m << *(m->load());
return 0;
```

Output1:

/Users/raffialanbezirjian/Desktop/345A1/cmake-build-debug/345A1

../artic.mapThe map is composed of 6 continents and 54 territories.

Here are all the list of continents and territories:

Here is Continent 1, Artic and its territories:

Territory 54, North_Pole

Here is Continent 2, Canada and its territories:

Territory 1, Whitehorse

Territory 2, Dawson

Territory 3, Watson_Lake

Territory 4, Inuvik

Territory 5, Hay_River

Territory 6, Echo_Bay

Territory 7, Yellowknife

Territory 8, Cambridge_Bay

Territory 9, Resolute

Territory 10, Alert

Territory 11, Repulse_Bay

Territory 12, Rankin_Inlet

Territory 13, Iqaluit

Here is Continent 3, Russia and its territories:

Territory 35, Murmansk

Territory 36, Arkangelsk

Territory 37, Saint_Petersburg

Territory 38, Moscow

Territory 39, NizHiniy_Novogorod

Territory 40, Kazan

Territory 41, Perm
Territory 42, Dikson
Territory 43, Norilsk
Territory 44, Tiksi
Territory 45, Verkhoyansk
Territory 46, Cherskiy
Territory 47, Provideniya
Territory 48, Anadyr
Territory 49, Magadan
Territory 50, Oymyakon
Territory 51, Yakustsk
Territory 52, Okhotsk
Territory 53, Pevek

Here is Continent 4, Norway and its territories:

Territory 23, Longyearbyen
Territory 24, Tromsø
Territory 25, Oslo

Here is Continent 5, United_States and its territories:

Territory 14, Prudhoe_Bay
Territory 15, Barrow
Territory 16, Nome
Territory 17, Fairbanks
Territory 18, Valdez
Territory 19, Anchorage
Territory 20, Bethel
Territory 21, Kodiak
Territory 22, Juneau

Here is Continent 6, Denmark and its territories:

Territory 26, Narsarsuaq
Territory 27, Tasiilaq
Territory 28, Paamiut
Territory 29, Nuuk
Territory 30, Kangerlussuaq
Territory 31, Ittoqqortoormiit
Territory 32, Qaanaaq
Territory 33, Nord
Territory 34, Torshavn

Process finished with exit code 0

Case 2:

```
MapLoader* m3 = new MapLoader("../swiss.map");  
cout << *m3 << *(m3->load());  
return 0;
```

Output 2:

/Users/raffialanbezirjian/Desktop/345A1/cmake-build-debug/345A1

../swiss.mapThe map is composed of 6 continents and 27 territories.

Here are all the list of continents and territories:

Here is Continent 1, GE-VD-NE-FR and its territories:

Territory 1, Waadt

Territory 2, Neuenburg

Territory 3, Fribourg

Territory 4, Geneve

Here is Continent 2, JU-BS-BL-SO and its territories:

Territory 5, Jura

Territory 6, Baselstadt

Territory 7, Baselland

Territory 8, Solothurn

Here is Continent 3, BE-VS-OW-NW-UR and its territories:

Territory 9, Bern

Territory 10, Wallis

Territory 11, Uri

Territory 12, Obwalden

Territory 13, Nidwalden

Here is Continent 4, AG-LU-ZH-ZG-SH and its territories:

Territory 14, Luzern

Territory 15, Aargau

Territory 16, Zug

Territory 17, Zuerich

Territory 18, Schaffhausen

Here is Continent 5, TG-SG-AR-AI-LI and its territories:

Territory 19, Thurgau

Territory 20, St-Gallen

Territory 21, Appenzell-Ausserrhoden

Territory 22, Appenzell-Innerrhoden

Territory 23, Liechtenstein

Here is Continent 6, SZ-GL-GR-TI and its territories:

Territory 24, Schwyz

Territory 25, Glarus

Territory 26, Graubunden
Territory 27, Tessin

Process finished with exit code 0

Case 3: (Invalid Case)

```
int main() {
    int k;
    vector<string> file_vec = {"../mexico.map", "../mexico_err1.map",
"../mexico_err2.map"};

    for(auto file_name:file_vec)
    {
        MapLoader* m = new MapLoader(file_name);

        cout<<"\nReading map file :" <<*m <<endl;

        Map* map = m->load();

        if(map)
        {
            cout <<  "Writing map data" <<endl;
            cout << *map;
        }
        else{
            cout <<  "Error: Cannot Read Map File" <<endl;
        }

    }

    return 0;
}
```

Output 3:

/Users/raffialanbezirjian/Desktop/345A1/cmake-build-debug/345A1

Reading map file :../mexico.map

Writing map data

The map is composed of 5 continents and 32 territories.

Here are all the list of continents and territories:

Here is Continent 1, Northern_States and its territories:

Territory 1, Baja_California_Sur

Territory 2, Baja_California

Territory 3, Sonora

Territory 4, Sinaloa

Territory 5, Durango

Territory 6, Chihuahua

Territory 7, Coahuila

Territory 8, Nuevo_Leon

Territory 9, Tamaulipas

Here is Continent 2, North_Central_States and its territories:

Territory 10, San_Luis_Potosi

Territory 11, Guanajuato

Territory 12, Aguascalientes

Territory 13, Zacatecas

Here is Continent 3, Western_States and its territories:

Territory 14, Nayarit

Territory 15, Jalisco

Territory 16, Colima

Territory 17, Michoacan

Here is Continent 4, South_Central_States and its territories:

Territory 18, Mexico

Territory 19, Queretaro

Territory 20, Hidalgo

Territory 21, Tlaxcala

Territory 22, Puebla

Territory 23, Morelos

Territory 24, Distrito_Federal

Here is Continent 5, Southern_States and its territories:

Territory 25, Guerrero

Territory 26, Oaxaca

Territory 27, Veracruz
Territory 28, Chiapas
Territory 29, Tabasco
Territory 30, Campeche
Territory 31, Quintana_Roo
Territory 32, Yucatan

Reading map file :../mexico_err1.map
Error: Cannot Read Map File

Reading map file :../mexico_err2.map
Error: Cannot Read Map File

Process finished with exit code 0
