WEEK 2

Exercise 1

```cpp
/*
RODRIGUEZ Diego Guilhem
Exercise 1
*/

#include <iostream>
using namespace std;

int main() {
    int country, city;
        cout << "Select a country" << endl;
    cout << "(1)Korea, (2)Japan, (3)France" << endl;
    cin >> country;
    switch (country) {
    case 1:
        cout << "Select a city: (1)Seoul, (2)Incheon" << endl;
        cin >> city;
        if (city == 1)
            cout << "You select Seoul Korea." << endl;
        else
            cout << "You select Incheon Korea." << endl;
        break;
    case 2:
        cout << "Select a city: (1)Osaka, (2)Tokyo" << endl;
        cin >> city;
        if (city == 1)
            cout << "You select Osaka Japan." << endl;
        else
            cout << "You select Tokyo Japan." << endl;
        break;
    // Adding France country with two cities: Toulouse and Paris
    case 3:
        cout << "Select a city: (1)Toulouse, (2)Paris" << endl;
        cin >> city;
        if (city == 1)
            cout << "You select Toulouse France." << endl;
        else
            cout << "You select Paris France." << endl;
        break;
    default:
        cout << "Please select 1, 2 or 3 for country" << endl;
    }
    return 0;
}
```

```
→  TP_WEEK2 ./Ex01
Select a country
(1)Korea, (2)Japan, (3)France
3
Select a city: (1)Toulouse, (2)Paris
1
You select Toulouse France.
→  TP_WEEK2 ./Ex01
Select a country
(1)Korea, (2)Japan, (3)France
3
Select a city: (1)Toulouse, (2)Paris
2
You select Paris France.
→  TP_WEEK2 █
```

Exercise 2

```
/*
RODRIGUEZ Diego Guilhem
Exercise 2
*/

#include <iostream>
#include <climits>
using namespace std;

int main() {
    int x;
    int max = INT_MIN;
    int min = INT_MAX;
    cout << "Type an integer number:";
    cin >> max;
    min = max;
    for (int i = 1; i < 10; i++) {
        cout << "Type an integer number:";
        cin >> x;
```

```
        if (x > max)
            max = x;
        if (x < min)
            min = x;
    }
    cout << "The maximum number you typed is " << max << endl;
    cout << "The minimum number you typed is " << min << endl;
    return 0;
}
```

```
→  TP_WEEK2 ./Ex02
Type an integer number:23
Type an integer number:43
Type an integer number:897
Type an integer number:-12
Type an integer number:3
Type an integer number:-111
Type an integer number:242
Type an integer number:-1234
Type an integer number:12452
Type an integer number:2
The maximum number you typed is 12452
The minimum number you typed is -1234
→  TP_WEEK2
```

Exercise 3

```
/*
RODRIGUEZ Diego Guilhem
Exercise 3
*/

#include <iostream>
using namespace std;

// Function prototype (declaration)
int add(int, int);
int multiplication(int, int);
```

```cpp
int main()
{
    int num1, num2, sum, mult;
    cout << "Enters two numbers to add: ";
    cin >> num1 >> num2;

    // Function call
    sum = add(num1, num2);
    cout << "Sum = " << sum << endl;

    // Using multiplication
    mult = multiplication(num1, num2);
    cout << "Product = " << mult << endl;
    return 0;
}

// Function definition
int add(int a, int b)
{
    int add;
    add = a + b;

    // Return statement
    return add;
}

/*
Multiplication function
a: first member
b: second member
*/
int multiplication(int a, int b) {
    return a*b;
}
```