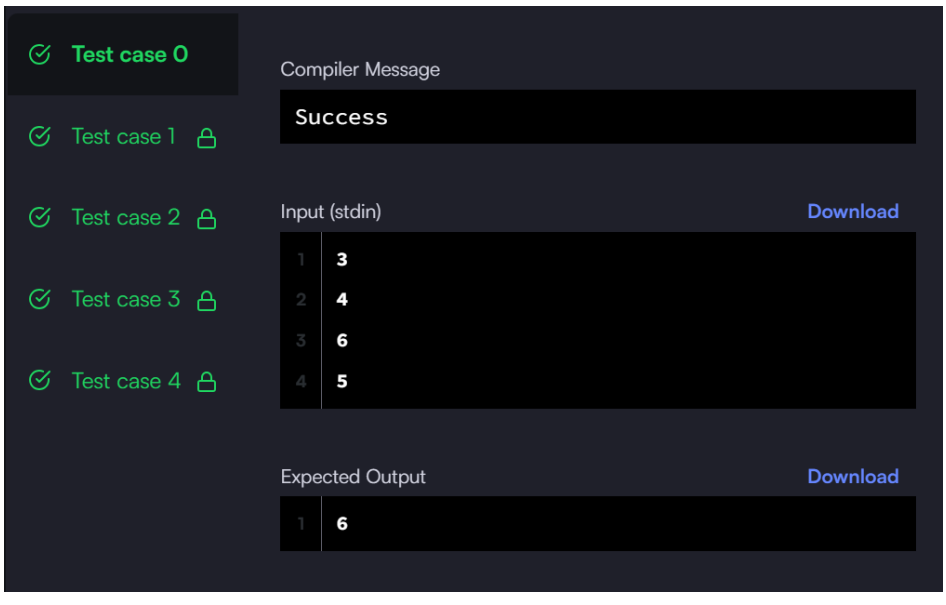
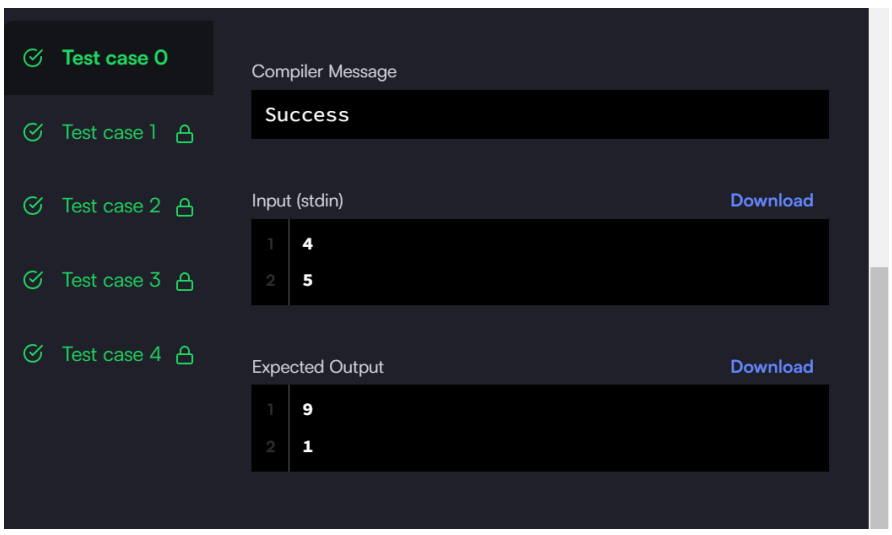
1.) Functions

```
#include <iostream>
#include <cstdio>
using namespace std;
int max_of_four(int a, int b, int c, int d) {
    int max = a;
    if (b > max) {
        max = b;
    }
    if (c > max) {
        max = c;
    }
    if (d > max) {
        max = d;
    }
    return max;
}

int main() {
    int a, b, c, d;
    scanf("%d %d %d %d", &a, &b, &c, &d);
    int ans = max_of_four(a, b, c, d);
    printf("%d", ans);

    return 0;
}
```



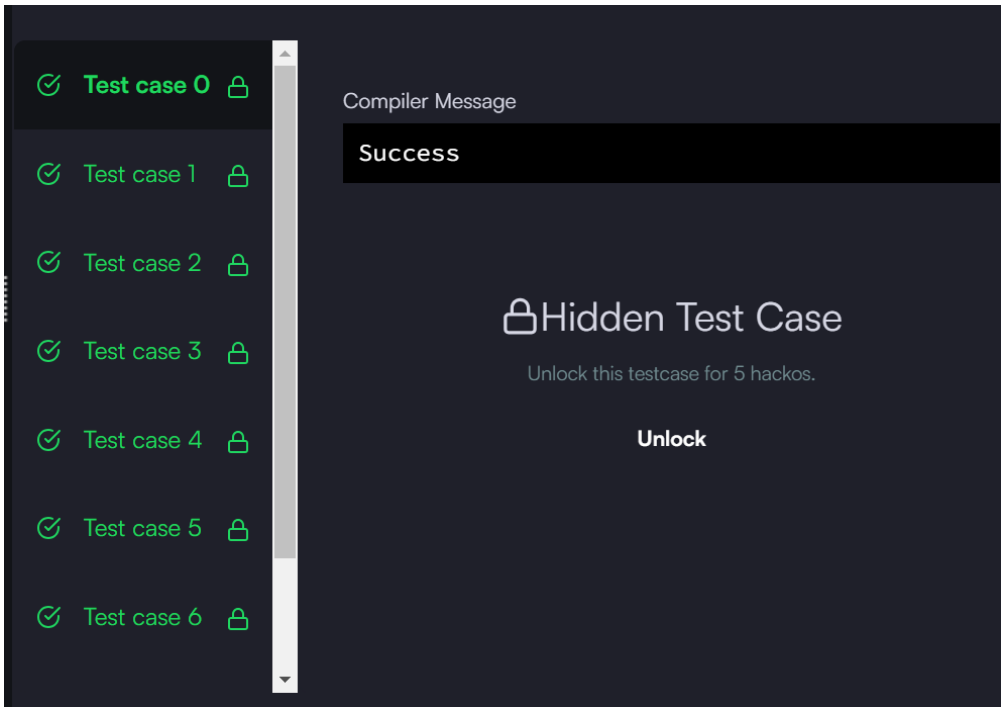
2.) Pointer

```
#include <stdio.h>
void update(int *a,int *b) {
   int sum = *a+*b;
   int subtract;
   if(*a>*b)
   {
       subtract = *a-*b;
   }
   else
   {
      subtract = *b-*a;
   }
    *a = sum;
    *b = subtract;
  }
int main() {
   int a, b;
   int *pa = &a, *pb = &b;

   scanf("%d %d", &a, &b);
   update(pa, pb);
   printf("%d\n%d", a, b);

   return 0;
}
```



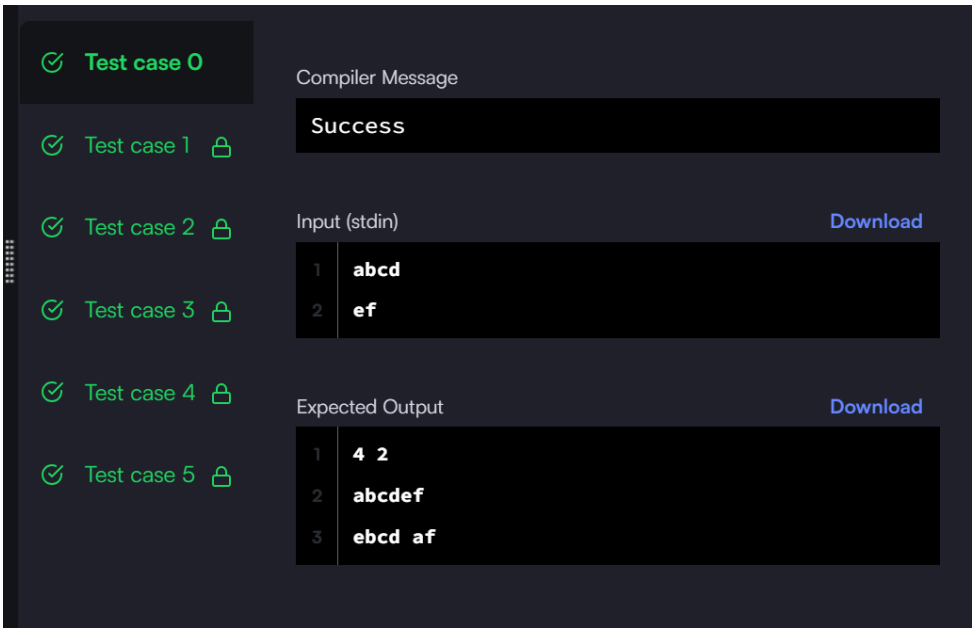
3.) Arrays Introduction

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

int main() {
   int n ;
   cin >> n;
   int a[n] ;
   for(int i =  0 ; i<n ;i++)
   {
      cin >> a[i];
   }
   for(int i=n-1 ; i>=0 ; i--)
   {
      cout << a[i] << " ";
   }
   return 0;
}
```



4.) Strings

```
#include <iostream>
#include <string>
using namespace std;

int main() {
    string a, b;
    cin >> a >> b;

    cout << a.size() << " " << b.size() << endl;
    cout << a + b << endl;

    char temp = a[0];
    a[0] = b[0];
    b[0] = temp;

    cout << a << " " << b << endl;

    return 0;
}
```



5.) Class

```
#include <iostream>
#include <sstream>
using namespace std;

class Student {
private:
   int age;
   string first_name;
   string last_name;
   int standard;

public:
   void set_age(int a) {
      age = a;
   }

   void set_first_name(string fname) {
      first_name = fname;
   }

   void set_last_name(string lname) {
      last_name = lname;
   }

   void set_standard(int std) {
      standard = std;
   }

   int get_age() {
      return age;
```

```
    }

    string get_first_name() {
        return first_name;
    }

    string get_last_name() {
        return last_name;
    }

    int get_standard() {
        return standard;
    }

    string to_string() {
        stringstream ss;
        ss << age << "," << first_name << "," << last_name << "," << standard;
        return ss.str();
    }
};

int main() {
    int age, standard;
    string first_name, last_name;

    cin >> age >> first_name >> last_name >> standard;

    Student st;
    st.set_age(age);
    st.set_standard(standard);
    st.set_first_name(first_name);
```

```
    st.set_last_name(last_name);

    cout << st.get_age() << "\n";
    cout << st.get_last_name() << ", " << st.get_first_name() << "\n";
    cout << st.get_standard() << "\n";
    cout << "\n";
    cout << st.to_string();

    return 0;
}
```