

```

> make -s
> ./main
Overflow detected at 2147483647 + 2147483647
Overflow detected at 2147483647 + 1
1 + 200 = 201
42 + 1200 = 1242
> 

```

// Hello, your computer has virus.

// Author: Kenry Yu, Olenka Bilinska, Diego Garcia, Brianna Soriano

// Demo time: 4:52 PM

```
#include <iostream>
```

```
#include <limits.h>
```

```
#include <string>
```

```
using namespace std;
```

```
int safeAdd(int x, int y) {
```

```
    int result = x + y;
```

```
    if ((x > 0 && y > 0 && result < 0) || (x < 0 && y < 0 && result > 0)) {
```

```
        throw string("Overflow detected at " + to_string(x) + " + " + to_string(y));
```

```
    }
```

```
    return result;
```

```
}
```

```
int main() {
```

```
    int array1[4] = {INT_MAX, INT_MAX, 1, 42};
```

```
    int array2[4] = {INT_MAX, 1, 200, 1200};
```

```
    for (int i = 0; i < 4; i++) {
```

```
        try {
```

```
            int result = safeAdd(array1[i], array2[i]);
```

```
            cout << array1[i] << " + " << array2[i] << " = " << result << endl;
```

```
        } catch (const string &error) {
```

```
        cout << error << endl;
    }
}
return 0;
}
```