

Question 1

```
give an integer: 6
give another: 5
give a float: 56.7
give another: 4.1
ix * iy: 30, fx * fy: 232.47
fx * ix: 340.2, fx * ix floored: 340
```

Question 2

The swap function with the references was easiest to use. The one with pointers worked, but wasn't as convenient to use. The one without anything was a pain to make and didn't really do anything

```
give num x: 5
give num y: 4
swap without anything: 4 5
swap with ref: 4 5
swap with pointer : 5 4
```

Question 3

```
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 5
give operator: +
the answer is: 10
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 4
give operator: -
the answer is: 1
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 5
give operator: *
the answer is: 25
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 5
give operator: /
the answer is: 1
```

Question 4

```
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 5
give operator: +
the answer is: 10
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 4
give operator: -
the answer is: 1
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 5
give operator: *
the answer is: 25
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q3 > ./run
give number: 5
give another: 5
give operator: /
the answer is: 1
```

Question 5

```
kvnen@JauhoMyilly~/Documents/Cpp2025/lab2/q5 > ./run
15
10
7
4
1
```

Question 6

```
kvnen@JauhoMylly~/Documents/Cpp2025/lab2/q6 > g++ main.cpp -o run
kvnen@JauhoMylly~/Documents/Cpp2025/lab2/q6 > ./run
what do you want to do?
(1)add student
(2)list all students
(3)search by id
(4)exit
1
Enter student name: antti
Enter student id: 1234
Enter student grade: 0.6
what do you want to do?
(1)add student
(2)list all students
(3)search by id
(4)exit
1
Enter student name: aaaaa
Enter student id: 1234555324
Enter student grade: 14.5
what do you want to do?
(1)add student
(2)list all students
(3)search by id
(4)exit
1
Enter student name: jfkdsajöf
Enter student id: 34342
Enter student grade: 4.3
what do you want to do?
(1)add student
(2)list all students
(3)search by id
(4)exit
3
give id to search: 1234
Name: antti
    Id: 1234
    Grade: 0.6
what do you want to do?
(1)add student
(2)list all students
(3)search by id
(4)exit
2
Name: antti
    Id: 1234
    Grade: 0.6
Name: aaaaa
    Id: 1234555324
    Grade: 14.5
Name: jfkdsajöf
    Id: 34342
    Grade: 4.3
what do you want to do?
(1)add student
(2)list all students
(3)search by id
(4)exit
4
bye bye
kvnen@JauhoMylly~/Documents/Cpp2025/lab2/q6 > 
```

Question 7

The same variable can be accessed and modified from both pointers.

```
ptr1 = 100 ptr2 = 100
ptr1 = 101 ptr2 = 101
```

Question 8

Changing the reference changes the actual variable.

