

Homework 3 (15 points)

Arrays and pointers (Fibonacci numbers)

1. (4 points) Rework the code you obtained in HW1.3:
 - ▶ Define in the main() function a local array of a constant length.
 - ▶ Rewrite the fibo(int x0, int x1, int n) function so that it
 - 1.1 accepts the array as an additional parameter and
 - 1.2 fills the passed array with the first n Fibonacci numbers starting with x0, x1.
 - ▶ Pass the array you defined in the main() function to the fibo() function.
2. (3 points) Rework the code you produced in HW2.1:
 - ▶ Add a function printIntArray () so that it
 - 2.1 accepts an int array as a parameter and
 - 2.2 prints its contents.
 - ▶ Remove the printing code from the fibo() function.
 - ▶ Modify the main() function to use both fibo() and printIntArray () .

Homework 2 (15 points)

Arrays and pointers (Fibonacci numbers)

3. (4 points) Rework the code you obtained in HW2.2 to use a dynamically-allocated array of a variable length (entered by the user) instead of a constant size local array.
4. (4 points) Modify the code you obtained in HW2.3 to accept three command line arguments n , x_0 and x_1 , instead of asking the user to enter them manually. For example, if the executable file is called `fibo`, the command line

```
fibo 40 0 1 [ENTER]
```

should print the first 40 Fibonacci numbers starting with 0, 1 and exit.

E-mail the answer and the source code to `ljank@ippt.pan.pl`.