

Fundamentals of Computing and Programming

In-class programming exercise. Time Limit: 30min

October 26 , 2022

For this assignment, you will write a program, compile and execute it. Once you are done please submit the program to this email address for evaluation:

You will write a program with the following functions:

1. `void read_marks(float a[], int n);` This function reads into the array `a` , the marks of `n` students.
2. `void print_marks(float a[], int n);` This function prints `n` student marks in the array `a` .
3. `int filter_marks(float a[], int n, float limit, float filtered[]);`
This function copies from `a[]` into `filtered[]` just those elements that are at most equal to `limit`. It returns the number of such elements copied.
4. A `main()` function that asks the user for the number of students whose marks will be read. Then uses the functions above to read the marks into an array, print the contents of the array. Then ask the user for a limit value and then use the filtering function above to get the marks less than the given limit into another array.

Here is a sample of the execution of the program: For clarity the input given by the user is shown in *italics*:

```
$ ./myprog
Give me a value for the number of marks you will enter
5
Give me the 5 student marks
34 23 65 12 28
Give me the limit for filtering
30
The set of marks up to 30 is:
23 12 28
$
```