

CH-230-A

Programming in C and C++

C/C++

Lecture 14

Dr. Kinga Lipskoch

Fall 2020

Practice Sheet



- ▶ Practice sheet
https://grader.eecs.jacobs-university.de/courses/ch_230_a/2020_2/assignments/practice_sheet.pdf
- ▶ Final exam could have similar exercises
- ▶ Final exam will contain 9-11 problems
- ▶ Exercise writing code on paper
- ▶ Ask questions on Friday and Saturday (help sessions), Monday (office hours and grand tutorial)
- ▶ Attend the grand tutorial on Monday, the 7th of December, 2020, 19:00 - 21:00 online via Teams
- ▶ **Final exam:** Tuesday, 8th of December, 2020, 12:30 - 14:30 in SCC Hall 1, Hall 2, Hall 3, Hall 4

Common Mistakes in Exams

- ▶ Not reading the problem statement carefully
- ▶ Forgetting to allocate dynamic memory
- ▶ Forgetting to deallocate dynamic memory
- ▶ Forgetting to check the success of memory allocation for `malloc`
- ▶ Forgetting to check the success of opening files for `fopen`
- ▶ Writing components of programs which were not asked for
- ▶ Forgetting to close files at the end of program

Common Mistakes in the Assignments (1)

- ▶ Not initializing a variable and then increment it by 1 or
- ▶ Not closing files
- ▶ When supposed to return an array of characters, return a character at position `i`
- ▶ Using 0 for bit mask instead of 1
- ▶ Not using bitwise operators and bit masks properly
- ▶ Segmentation fault because of missing memory allocation

Common Mistakes in the Assignments (2)

- ▶ Forgetting to check for corner cases (i.e., data structure is empty when remove or add, data structure is full when add)
- ▶ Incorrect usage of `const`
- ▶ Inconsistencies between prototypes and function/method definition
- ▶ Consider if input may or may not contain spaces
- ▶ Problem with copy constructor and overloading =



Missing the Final Exam (1)

Consequences of **unexcused** absence:

- ▶ Will automatically be scheduled to sit in the next make-up exam
- ▶ Unexcused absence will be counted as failed attempt of their first trail (out of three)

Missing the Final Exam (2)

Consequences of **excused** absence:

- ▶ All students will automatically be scheduled to sit in the next make-up exam
- ▶ The make-up exam is the first trial in a module exam for 1st year UG students
- ▶ Bachelor policies for UG students as of Fall 2020
https://www.jacobs-university.de/sites/default/files/bachelor_policies_v3.5.pdf
- ▶ Bachelor policies for UG students as of Fall 2019
https://www.jacobs-university.de/sites/default/files/bachelor_policies_v3.pdf

Valid Official Excuse

- ▶ Notify instructor before missing exams (before start of the exam)
- ▶ Go to or call the doctor while you are sick not after
- ▶ Submit excuse to Registrar Office the latest on first day after the end of sickness
- ▶ All of the above have to be satisfied for obtaining an excused absence for a final exam

Cancelling a Passing Grade for the Exam

- ▶ Currently, the policies do not include a grade improvement possibility for final exams
- ▶ If you feel strongly about being able to write a better grade, you can strike out the whole content of the exam before submission, you will receive 0% and you can write the exam again in January 2021
- ▶ In this case you will lose one trial to pass from the three possible trials
- ▶ Use this very carefully