

Programming Parallel Computers

Aalto 2023

Index	Contest	Submissions	Pre	0	CP	1	2a	2b	2c	3a	3b	4	5	9a	9c	IS	4	6a	6b	9a
MF	1	2	9a	SO	4	5	6	P	9a	X	0a	0b	9a	9b						

All exercises

Welcome to Aalto 2023 — Aalto University course CS-E4580 Programming Parallel Computers, spring 2023!

Here you can find the exercises for the Aalto University course that starts on April 24, 2023. To take part in the course, please register in Sisu as usual, read the [MyCourses page](#), and follow our [Zulip discussion forum](#).

You can try to solve the following exercises. For full points, please submit your solution before the deadline; for partial points you can still try to submit until the course ends. Resubmissions are always safe; you will never lose points if you resubmit something (but if you resubmit after the deadline, you will not get full points that way, either).

Task	Attempts	Expected	Points	Max	Rating	Rec.	Deadline for full points
Pre — prerequisite test							
Pre0	0	—	—	1	★	R	2023-04-28 at 23:59:59
CP — correlated pairs							
CP1	0	—	—	5	★	R	2023-04-30 at 23:59:59
CP2a	0	—	—	3	★	R	2023-05-07 at 23:59:59
CP2b	0	—	—	3	★	R	2023-05-07 at 23:59:59
CP2c	0	—	—	3	★	R	2023-05-07 at 23:59:59
CP3a	0	—	—	5 + 2	★★	R	2023-05-14 at 23:59:59
CP3b	0	—	—	5 + 2	★★	R	2023-05-14 at 23:59:59
CP4	0	—	—	5	★	R	2023-05-21 at 23:59:59
CP5	0	—	—	10 + 2	★★	R	2023-05-28 at 23:59:59
CP9a	0	—	—	5	★★★		2023-06-04 at 23:59:59
CP9c	0	—	—	0	★★		2023-06-04 at 23:59:59
IS — image segmentation							
IS4	0	—	—	5 + 2	★★	R	2023-05-21 at 23:59:59
IS6a	0	—	—	5 + 2	★★★	R	2023-06-04 at 23:59:59
IS6b	0	—	—	5 + 2	★★	R	2023-06-04 at 23:59:59
IS9a	0	—	—	5	★★★		2023-06-04 at 23:59:59
MF — median filter							
MF1	0	—	—	5	★	R	2023-04-30 at 23:59:59
MF2	0	—	—	3	★	R	2023-05-07 at 23:59:59
MF9a	0	—	—	5	★★★		2023-06-04 at 23:59:59
SO — sorting							
S04	0	—	—	5 + 2	★★	R	2023-05-21 at 23:59:59
S05	0	—	—	5 + 2	★★	R	2023-05-28 at 23:59:59
S06	0	—	—	5 + 2	★★★	R	2023-06-04 at 23:59:59
P — project							
P9a	0	—	—	5	★★+		2023-06-04 at 23:59:59
X — extra							
X0a	0	—	—	0			2023-06-04 at 23:59:59
X0b	0	—	—	0			2023-06-04 at 23:59:59
X9a	0	—	—	1	+		2023-06-04 at 23:59:59
X9b	0	—	—	1	+	R	2023-06-04 at 23:59:59
Total	0	—	—	100 + 18			

“Expected” — the points scored by your submissions according to automatic grading. This is **not a final score**, as submissions are additionally graded by humans.

“Points” — the final amount of points given to your submissions by our course staff.

“Rec.” = recommended path — while you are free to solve any of the exercises in any order, we suggest that you try to solve at least these exercises.

“Rating” — an approximate indication of how much effort is needed for getting full points in each exercise. 1-star problems are easy to solve without too much effort, typically with less than 100 lines of code. 2-star problems may require a careful application of the ideas presented in the course material and plenty of experimentation, and a solution is typically more than 100 lines of code. 3-star problems are small research projects. Please note that in many of the exercises it is often much easier to get some points than full points.

Grading

This course is graded as follows:

Points	Grade
≥ 64	5
≥ 58	4
≥ 51	3
≥ 45	2
≥ 38	1

You have not yet got any points for this course.

Final deadline

This course closes on 2023-06-04 at 23:59:59 (Helsinki), i.e., **201 days and 3 hours ago**. After the course closes, you can no longer submit (or resubmit) anything for grading.