

Perfect number checking in MIPS

You need to be alert to (usually minor) changes that may be made to the assignment statement or to the guidelines after the assignment is first put up. Refresh this frame and re-read the assignment carefully before you make your final submission.

Aim

To get acquainted with MIPS assembly language and the system calls.

Assignment statement

Write a MIPS program which:

1. reads an integer with the prompt -- "Enter a positive integer:"
2. checks whether or not it is a perfect number -- i.e., whether its factors including 1 and excluding itself sum to itself, and
3. accordingly prints the message -- "The number {entered number} is (not) a perfect number"

Relevant documentation is made available via the notice page.

Marking Guidelines

Assignment marking is to be done only **after** the deadline expires, as submissions gets blocked after the assignment is marked.

Interactive interface, as specified	4
Appropriate use of system calls for printing:	8
Appropriate use of system call to read and integer:	5
Commenting of program	3
<i>Total Marks</i>	20

Assignment submission

Ensure that your program has the extension ".spim" (say perf.spim)

You name, roll number, group number, etc. should be available at the top of your submitted file, as comments.

You should also pick up your assignment statement and submit your assignment via the student tab of this course page.

You should keep submitting your incomplete assignment from time to time after making some progress, as you can submit any number of times before the deadline expires.

Warning

Cases of copying will be dealt with seriously and severely, with recommendation to the Dean to de-register the student from the course.