

SuperCon '95

Sponsored by Computer Center, Tokyo Institute of Technology

SUPER COMPUTER CONTEST '95 FOR HIGH SCHOOL STUDENTS

Entry Exercise

Write a program which calculates the natural logarithm of 2 to 3,000 digits of precision.

Contest Exercise "Stone-Combination Problem"

There are 40 stones, each weight is different. Choose correct combinations of stones which summation equals the given weight.

Problem: Write three programs which find the correct combinations to three kind of problems:

Type A: The weight is the summation of 5 stones. 10 different weights are given. The correct answer gains 1 point.

Type B: The weight is the summation of 10 stones. 10 different weights are given. The correct answer gains 5 points.

Type C: The weight is the summation of certain number of stones. 10 different weights are given.

The correct answer gains 10 points.

Evaluation: Run three type programs for given weights and stop the job when the wall clock time exceeds ten minutes. The team which gains highest score wins.

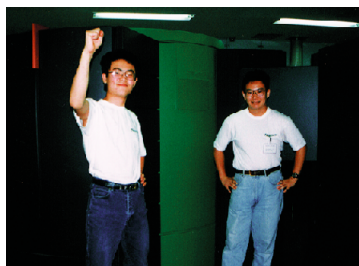
If the scores are the same, the team which gains the answers in the shortest periods.

The Contest was performed with the following hardware/software conditions : Cray C916/12256 (Clock 4 ns, 12 CPUs, 2GB Memories)

CPU: 9, Memory: 128 MB, Running mode: dedicated to one job at a time

Compiler options: nothing. (1) the inner most loop can be vectorized. (2) No autotasking, but directives can be allowed to be added into source codes.

Results: Winner's answer was perfect and the result was **4.7 seconds** wall clock time.



The Winner Team along with the supercomputer

Can you exceed the winner's result ?
We are waiting for your challenge next year 1996.

For more information, contact to : super-con95@cc.titech.ac.jp

