CN Lab 28- 1 -2022

NITW-GDB server:

Assume your junior has written a simple program P.cpp, for reading two numbers printing sum of them, reading two numbers printing difference of them and reading two numbers printing product of them.
You have to compile it and check for its correct execution.
Processes: GDB server S, Client C, Program Process P.
Files in use :
program code file : P.cpp ,
input test case file containing six numbers : IT.txt
Output test case file containing three numbers: OT.txt
Output file generated by P.exe process : Pout.txt

Scenario:

S waits on sfd.
C connects and sends P.cpp to S
S accepts and receives P.cpp and compiles it to P.exe
S forks.
S parent should wait for the child termination.
In child code of S:

Open file IT.txt with itfd.
Open file Pout.txt with poutfd.
dup2(itfd,0) , dup2(poutfd,1)
exec("P.exe")

// The P.exe process reads input(cin) from IT.txt and writes output(cout) to Pout.txt.

S parent code :
Open files Pout.txt(created by P.exe) and file OT.txt (the expected output) and compare them.
If both are same send "test case passed" to client C.
C displays the received message.
(note : Any other logics of your own can also be followed/allowed)

Submission link: closes by 5.00 PM today.
Submission time is specially noted/treated.(i.e. soon 'you' get output, submit then itself)

https://forms.gle/sEZgr4mHjyV1uSGP6