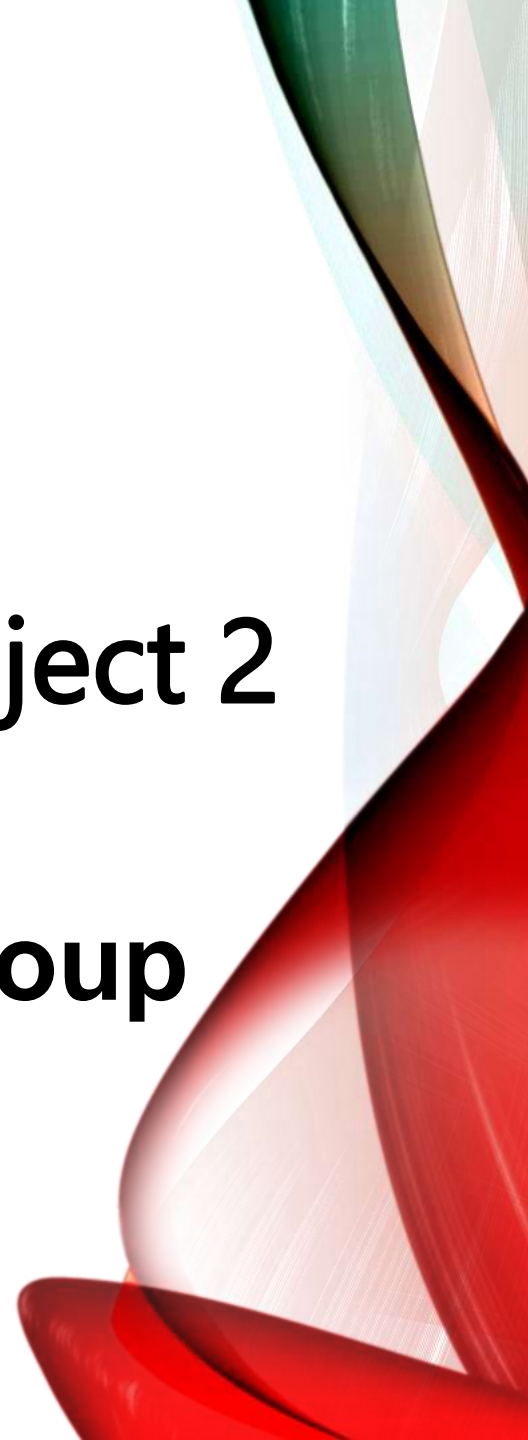


# 次世代無線網路概論

2022/11/16

Term Project 2

By TA Group





# INSTRUCTIONS

In this homework, you need to

- Write server and client programs to practice socket programming
- Zip your source code
- Name the zip file “**studentID\_hw2.zip**” and upload it to the Moodle system
- Demo your homework to TA group
- Example video link : [hw2\\_example](#)
- Mail to [network6459@gmail.com](mailto:network6459@gmail.com) if you have any question about this homework



# REQUIREMENTS

- In this program, you should write a simple calculator that
  - Includes mathematical operators “+ - \* / % ^ ( )” .
  - Accurate to **second decimal place**.
  - If the formula is invalid, e.g. divided by zero.. , then output “ **invalid input** ” .
- Only one client and one server are needed

The following is the introduction to the six operators:

- Ex :  $2+1=3$  ,  $5-2=3$  ,  $3*7=21$  ,  $45/5=9$  ,  $2^3=8$  ,  $5+8\%3=7$  ,  $5*2^2\%3=2$  ,  $2*9\%5+2*8/4=7$  → Order of operations
- The client inputs their formulas to the server for the calculation service (either by manual input or a .txt file input), gets the answers from the server, and prints results out on the console and write them to a file



# REQUIREMENTS

## Client :

- Mode 1 (single-line process)
  - Input formulas manually and send the inputs one by one to the server
  - Print the resulting answers on the screen
- Mode 2 (batch process)
  - Pack all formulas into one single text file and send the text file to the server for further data processing



# REQUIREMENTS

## Server :

- Confirm requests from clients
- Compute the formulas
- Print the answers on the screen
- Write the answer to the file(Ans.txt)



# HAND IN

- Source Code in .c/.cpp/.py
  - C/ C++/ Python
- Plagiarism is prohibited and will get a minus score if you do so
- In this project, we'll use source code plagiarism detection tool for plagiarism detection



# CHECK POINTS

- **Code : 70%**
  - TCP connection : 10%
  - Operator function : 10%
  - Mode1 : 10%
  - Mode2 : 15%
  - Correctness : 25%
- **Demo : 30%**



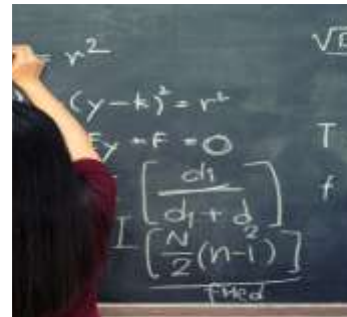
# TIMELINE



Finish homework in time



Deadline : 2022/11/27



Demo time : 2022/12/7





# DEMO

- Please fill the demo order sheet below before 11/25(Wen.) 11:59 p.m.
- [Demo List](#)