



Exercise on RPC



Exercise 1

- ▶ The server provides 2 services
 - ▶ Greeting
 - ▶ Local time
- ▶ The client receives from command line an argument specifying the service to ask to the server, included the **NULLPROC**

Exercise 2

- ▶ The server provides a service that multiply a couple of integer
 - ▶ Since RPC accepts only 1 argument, an appropriate structure must be defined
 - ▶ Along with the XDR conversion function
- ▶ Use of header file for defining the struct type and the XDR conversion function
- ▶ The client calls the procedure passing a couple of integers

Exercise 3

- ▶ The server accept a pointer to a char, prints it and modifies it
- ▶ We must define the type “char pointer”
 - ▶ And the corresponding XDR conversion function
- ▶ Use of header file for defining the char pointer type and the XDR conversion function

- ▶ The client prints the value of the char after the call return

Exercise 4

- ▶ The server accept a string as argument and returns the overturned string
- ▶ The client sends a string, receives an elaborated string and prints the received string

Exercise 5

- ▶ **The server receives:**
 - ▶ The name of a file
 - ▶ The position of the byte to be read
- ▶ **The server open the file, reads the byte at the specified position and returns the read byte**

- ▶ **The client:**
 - ▶ Sends a string representing the name of a file and the position of a byte to be read
 - ▶ Receives the read byte
 - ▶ Writes the byte to a local file

Exercise 6

- ▶ Iterate the previous exercise to transfer the content of an entire file
- ▶ Define how to manage the end of file