Understanding `fork()` in C: Practical Exercises

1- Write a program using `fork()` where the parent process prints `"Parent process"` and the child process prints `"Child process"`.

```c
#include <stdio.h>
#include <unistd.h>

int main() {
    int pid = fork();

    if (pid > 0) {
        printf("Parent process (PID: %d)\n", getpid());
    }
    else if (pid == 0) {
        printf("Child process (PID: %d, Parent PID: %d)\n", getpid(), getppid());
    }
    else {
        perror("Fork failed");
    }

    return 0;
}
```

2- Write a C program that takes two integers as command-line arguments. The parent process should create a child process using `fork()`. The **child process should print the first number first**, followed by the **parent process printing the second number**.

Bonus

1 - Write a C program that finds the maximum value in an array using two processes with `fork()`.

1- Write a C program that finds the sum of an array of values using four processes with `fork()`.