

Interprocess communication

Task:

Write two programs, i.e., Program1.c, and Program2.c that communicate with each other through a shared memory. Both the programs must be run indefinitely. For each line of the input (e.g., a sequence of alphanumeric strings) entered for program 1, program2 should display the number of words and number of numerical digits of the input.

Running instructions

- Open two terminals and navigate to the base folder '2_ipc'.
- In terminal 1, run the following command `g++ -pipe -O2 -std=c++14 Program1.cpp -lm -o P1 && ./P1`.
- In terminal 2, run the following command `g++ -pipe -O2 -std=c++14 Program2.cpp -lm -o P2 && ./P2`.
- Follow the instructions as shown in the terminal.
- To quit the program, press 'q'.

Sample Output

```
g++ -pipe -O2 -std=c++14 Program1.cpp -lm -o P1 && ./P1
Press 'q' to quit the program.
Enter data to be written: 1a2s3d4f5g6h

Enter data to be written: abcdefghijklmnopqrstuvwxyz
Enter data to be written: abcd1234
Enter data to be written: asd;ag'
Enter data to be written: OSAssignment
Enter data to be written: Question2
Enter data to be written: 
```

```
g++ -pipe -O2 -std=c++14 Program2.cpp -lm -o P2 && ./P2
"1a2s3d4f5g6h" has:
alphabets: 6
digits: 6

"abcdefghijklmnopqrstuvwxyz" has:
alphabets: 26
digits: 0

"abcd1234" has:
alphabets: 4
digits: 4

Please enter only alphanumeric string.

"OSAssignment" has:
alphabets: 12
digits: 0

"Question2" has:
alphabets: 8
digits: 1
```