

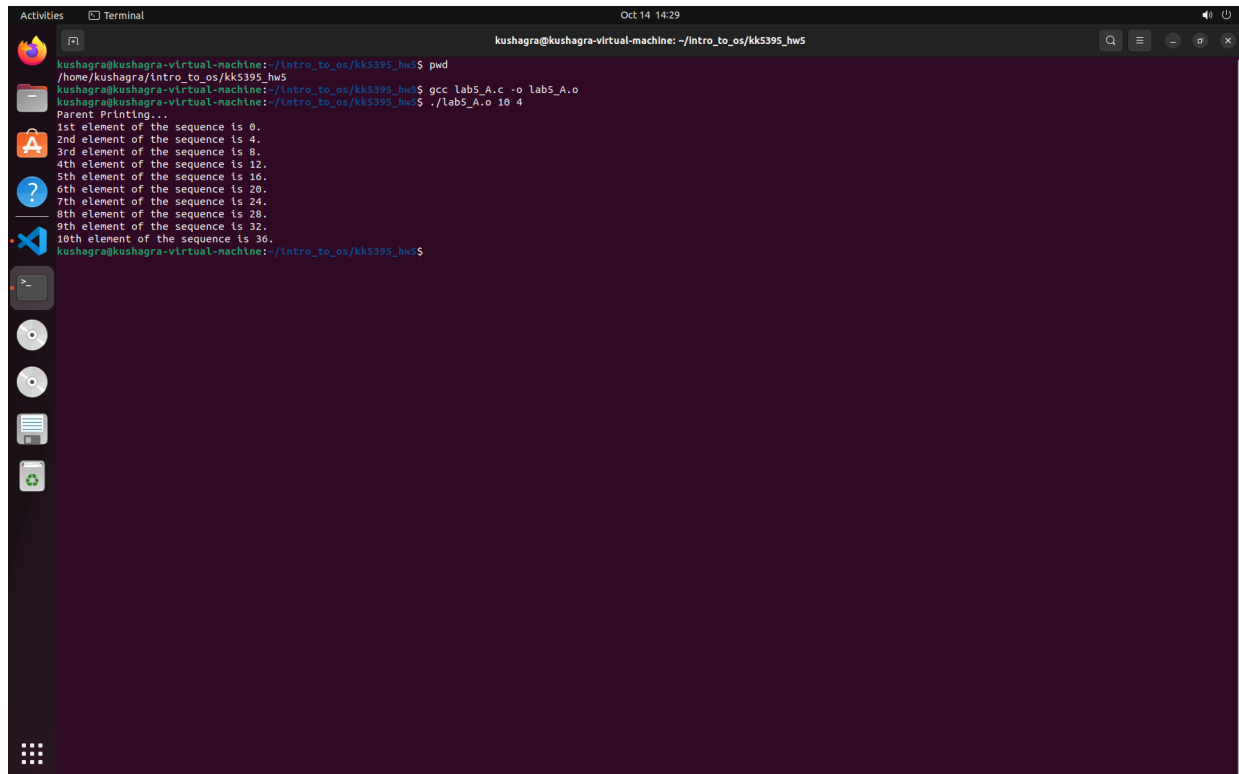
Assignment 5

10-14-23

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Ans A.

In this question we utilise shared memory to communicate between parent and child. The gist of the code is that child generates sequence elements one by one and parent prints as and when a new element is generated. Please refer to README for instructions to run the program. Also, PFA screenshot for the output of code in Question Number A.

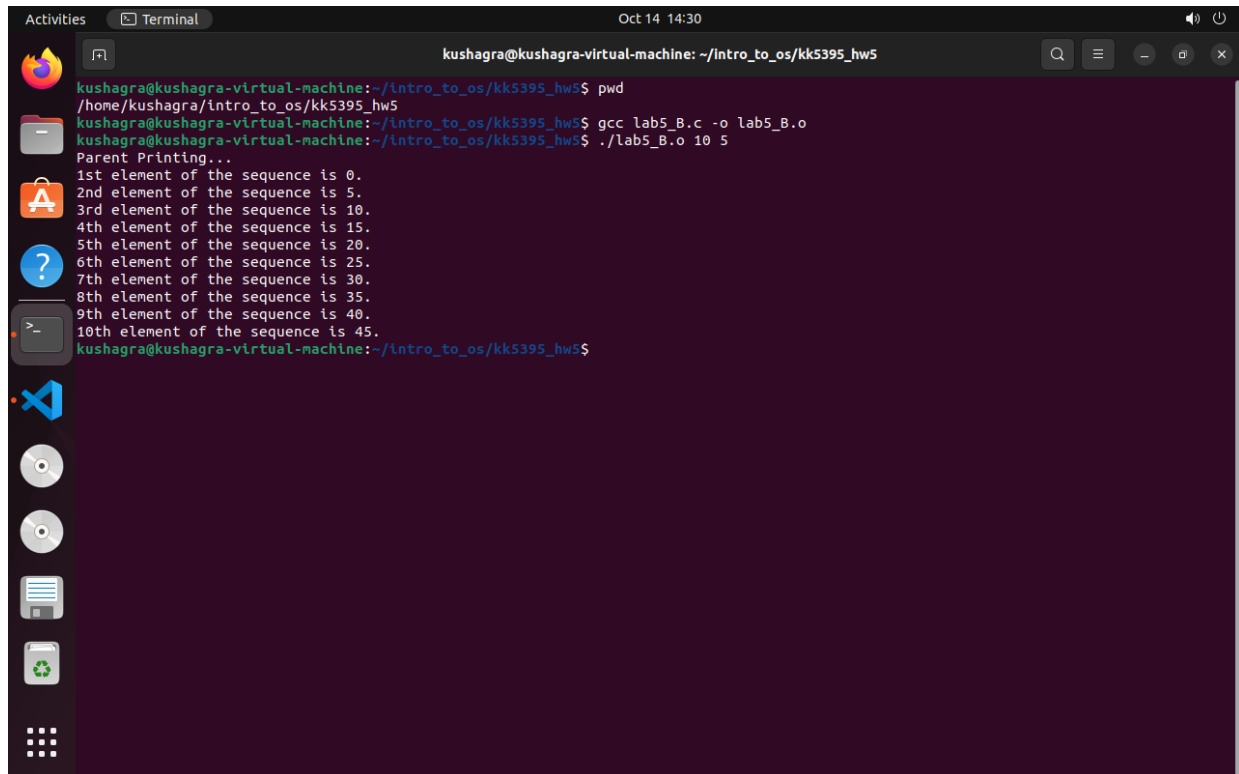


```
kushagra@kushagra-virtual-machine: ~/Intro_to_os/kk5395_hw5
kushagra@kushagra-virtual-machine: ~/Intro_to_os/kk5395_hw5$ pwd
/home/kushagra/Intro_to_os/kk5395_hw5
kushagra@kushagra-virtual-machine: ~/Intro_to_os/kk5395_hw5$ gcc lab5_A.c -o lab5_A.o
kushagra@kushagra-virtual-machine: ~/Intro_to_os/kk5395_hw5$ ./lab5_A.o 10 4
Parent Printing...
1st element of the sequence is 0.
2nd element of the sequence is 4.
3rd element of the sequence is 8.
4th element of the sequence is 12.
5th element of the sequence is 16.
6th element of the sequence is 20.
7th element of the sequence is 24.
8th element of the sequence is 28.
9th element of the sequence is 32.
10th element of the sequence is 36.
kushagra@kushagra-virtual-machine: ~/Intro_to_os/kk5395_hw5$
```

Figure 1: Snapshot

Ans B.

In this question we utilise pipes to communicate between parent and child. The gist of the code is that child generates sequence elements one by one and parent prints as and when a new element is generated. Please refer to README for instructions to run the program. Also, PFA screenshot for the output of code in Question Number B.



```
kushagra@kushagra-virtual-machine: ~/Intro_to_os/kk5395_hw5
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw5$ pwd
/home/kushagra/intro_to_os/kk5395_hw5
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw5$ gcc lab5_B.c -o lab5_B.o
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw5$ ./lab5_B.o 10 5
Parent Printing...
1st element of the sequence is 0.
2nd element of the sequence is 5.
3rd element of the sequence is 10.
4th element of the sequence is 15.
5th element of the sequence is 20.
6th element of the sequence is 25.
7th element of the sequence is 30.
8th element of the sequence is 35.
9th element of the sequence is 40.
10th element of the sequence is 45.
kushagra@kushagra-virtual-machine:~/Intro_to_os/kk5395_hw5$
```

Figure 2: Snapshot