Operating System Lab CS342

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Q1

Compilation:

gcc question1.c

Syntax:

./a.out

checkLine.c – the program whose lines are counted and printed in different txt files.

```
1 #include<stdio.h>
2 #include<string.h>
3 int main() (
4     printf("Hello World!");
5     return 0;
6 )
```

Sample Input and Output:

Input:

gcc question1.c

./a.out

Output:

```
chiku@DESKTOP-5JCAMRU:/mnt/d/tanishq/3rd year/6th sem/os_lab/midsem/question1$ gcc question1.c
chiku@DESKTOP-5JCAMRU:/mnt/d/tanishq/3rd year/6th sem/os_lab/midsem/question1$ ./a.out
The file checkLine.c has 6 lines
Child 1: I wrote line number: 1 !
Child 2: I wrote line number: 2 !
Child 3: I wrote line number: 3 !
Child 4: I wrote line number: 4 !
Child 5: I wrote line number: 5 !
Child 6: I wrote line number: 6 !
```

Q 2.

```
here are two files "parent.c" and "child.c" for this question<u>Compilation</u>: gcc -o parent parent.c gcc -o child child.c
```

Syntax:

./parent girl nancy boy mark boy joseph

Sample Input and Output:

Input:

./parent girl nancy boy mark boy joseph

Output:

```
chiku@DESKTOP-5JCAMRU:/mnt/d/tanishq/3rd year/6th sem/os_lab/midsem/question2$ ./parent girl nancy boy mark boy joseph
I have 3 children.
Child #2: i am a boy, and my name is mark
Child #3: i am a boy, and my name is joseph
Child #1: i am a girl, and my name is nancy
All child processes terminated. Parent exits
chiku@DESKTOP-5JCAMRU:/mnt/d/tanishq/3rd year/6th sem/os_lab/midsem/question2$
```

Q3.

Input:

5 2

0 10 2

371

462

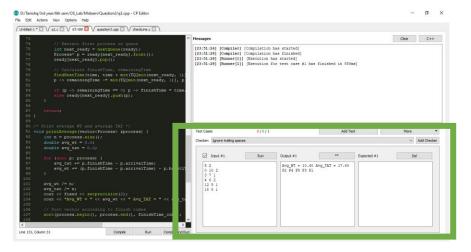
1251

1881

Output:

Average Waiting Time: 10.40 Average Turnaround Time: 17.60

Completion order of Processes: P2 P4 P5 P3 P1

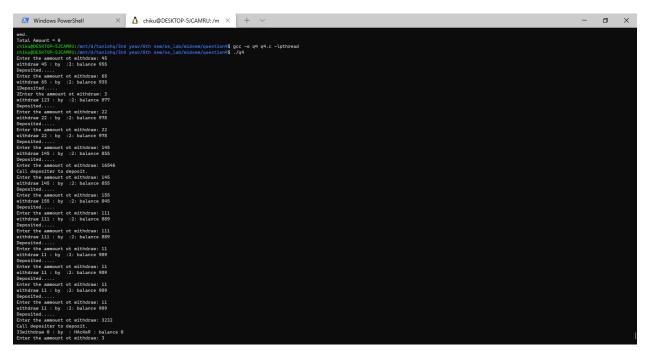


gcc -o q4 q4.c -lpthread

./q4

```
### Annual Control | Contr
```

Case2



As you can see, the program terminates, once hacker hacks treasure before the borrower.