LAB TASK #05

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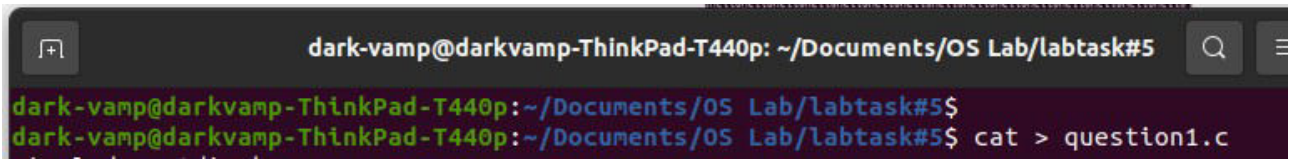
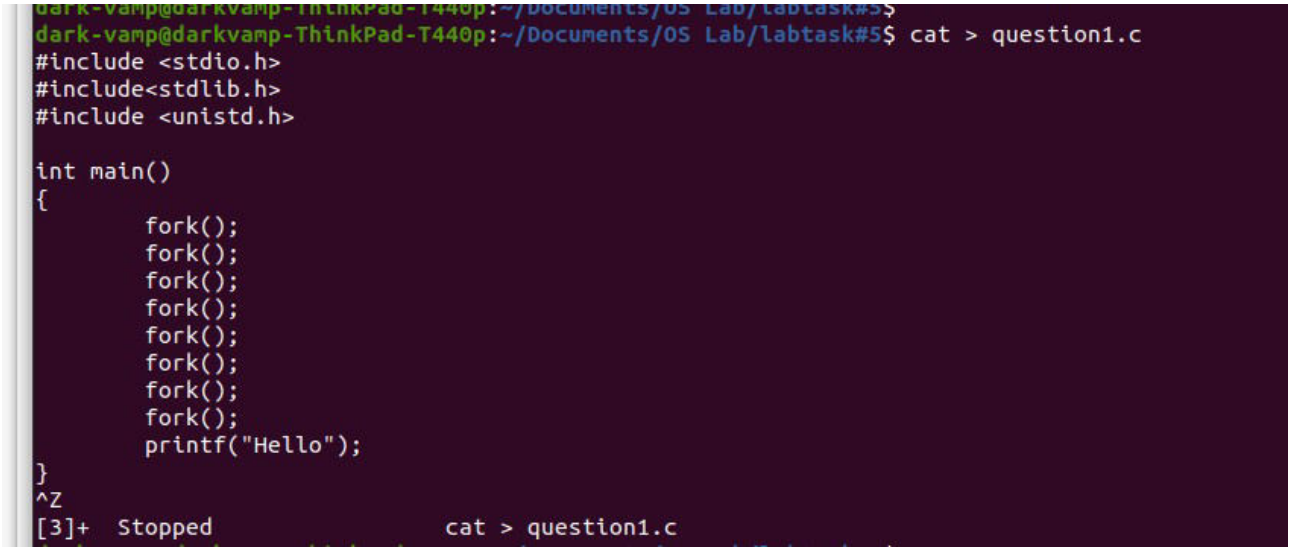
Operating System Lab

Q No.1: Write your C program for the following pseudo code. And answer the following questions after compilation and execution of code:

First of all we are going to open terminal and move to directory named as labtask#5 then we create a file named as question1 with c extension by using $command cat > question1.c in labtask#5 directory.



Then we write c code in it and save this code in question1.c file



After saved our code in file now we are going to compile our file by using this command
$ gcc question1.c -o question1.
Then we execute this file by using this command.
./question1
here we can see that our file is successfully compile and execute give us result in the terminal.

i) How many processes will be created?

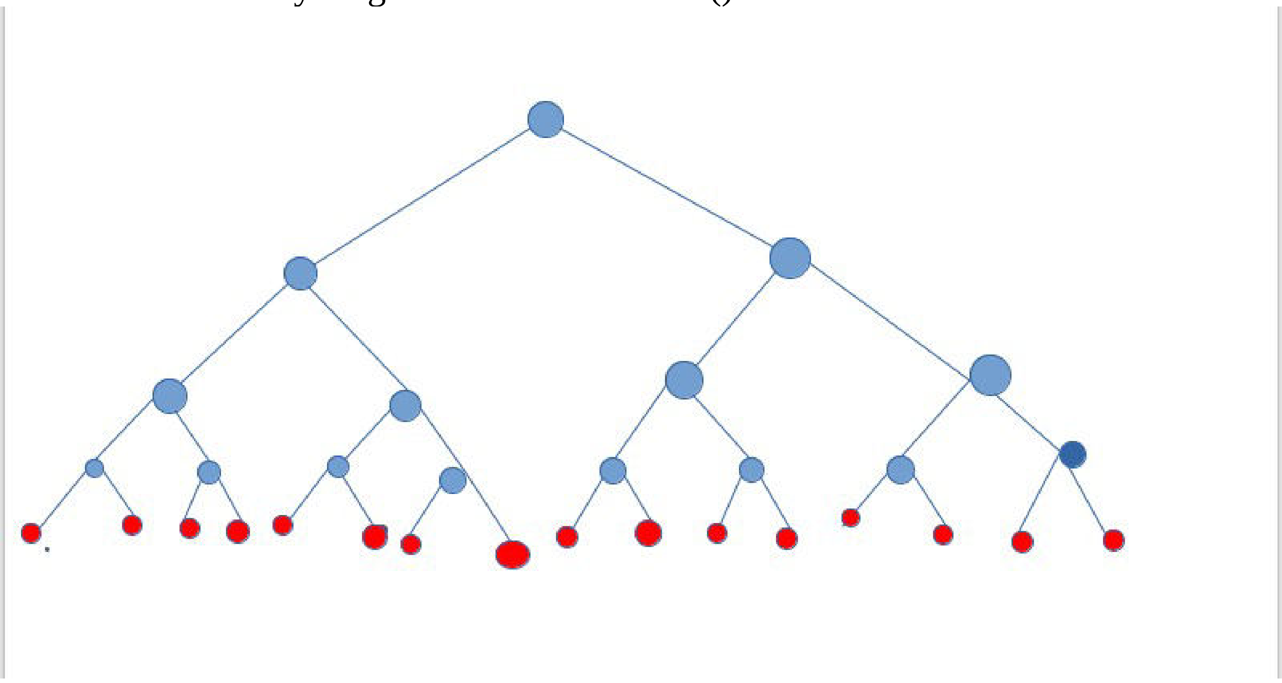
There are total straight eight fork(); in our code so 2^8 = 256 total processes creates.

ii) How many times “Hello” word will be printed on the screen after code execution?

There are total 256 times “Hello” word print on the screen after execution of our code.

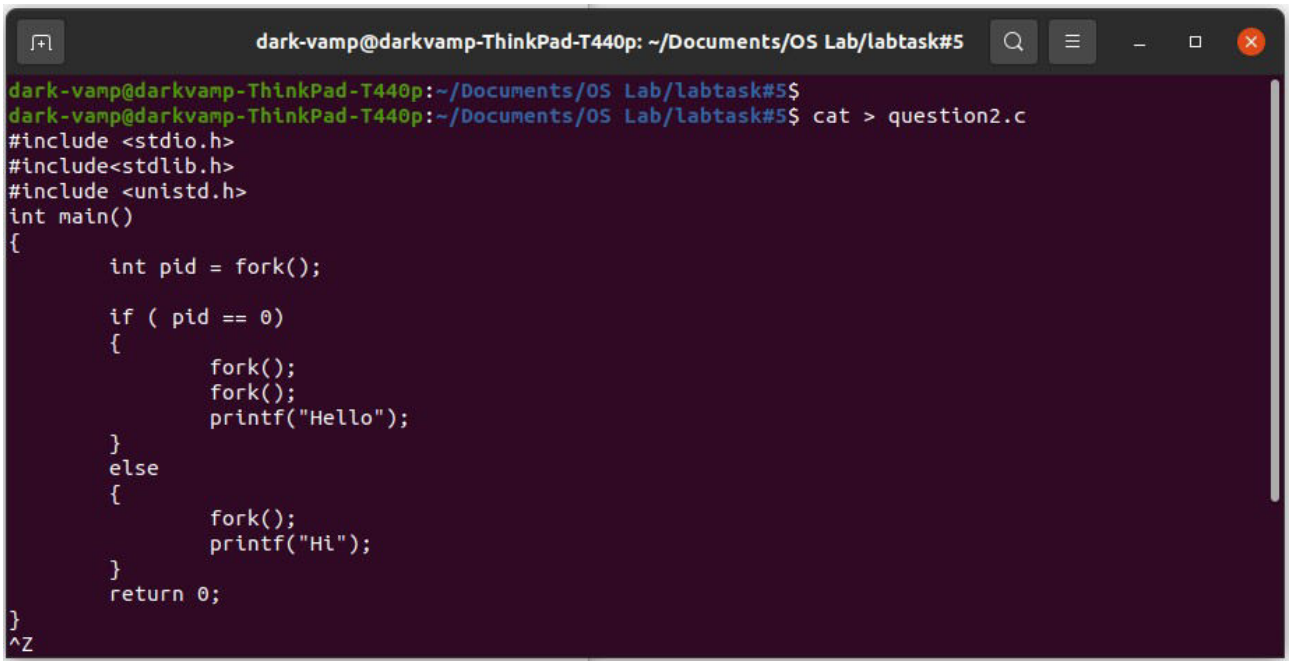
iii) Create tree hierarchy for this pseudocode?

Tree hierarchy diagram for first four fork() calls.



Q No.2: Write your C program for the following pseudocode. And answer the following questions after compilation and execution of code:

First of all we are going to open terminal and move to directory named as labtask#5 then we create a file named as question2 with c extension by using $command cat > question2.c in labtask#5 directory. then we write c code in it and save this code in question2.c file



After saved our code in file now we are going to compile our file by using this command
$ gcc question2.c -o question2.
Then we execute this file by using this command.
./question2
here we can see that our file is successfully compile and execute this code,and print the result on the terminal screen.

```
dark-vamp@darkvamp-ThinkPad-T440p: ~/Documents/OS Lab/labtask#5
dark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$
dark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$
dark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$ gcc question2.c -o question2
dark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$ ./question2
HelloHelloHellodark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$ HelloHelloHello
dark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$
dark-vamp@darkvamp-ThinkPad-T440p:~/Documents/OS Lab/labtask#5$
```

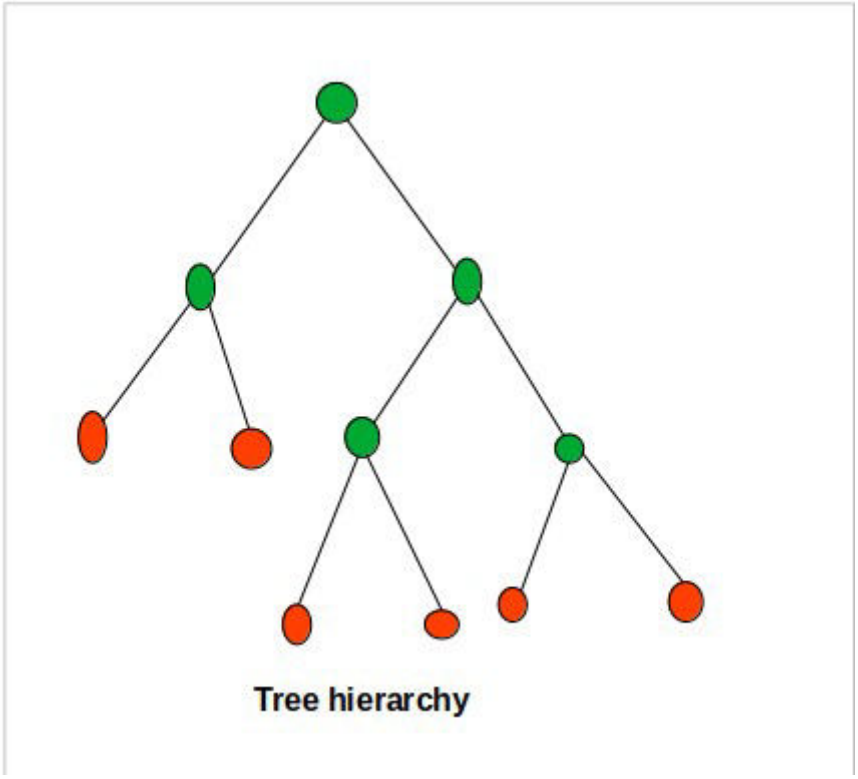
i) How many processes will be created?

There are 6 processes creates after compilation and execution of file.

ii) How many times “Hello” word will be printed on the screen after code execution?

There are total 6 times “Hello” word print on the screen after execution of our code.

iii) Create tree hierarchy for this pseudocode?



Tree hierarchy

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