HAMZA UMER BSCS – 4 – B OS LAB ASSIGNMENT # 2

**Q2.  
Output:**

PARENT0  
PARENT0  
PARENT0  
PARENT0  
PARENT0  
CHILD0  
CHILD1  
CHILD2  
CHILD3  
CHILD4

Text

Description automatically generated

Explanation:

* pid\_t forkreturn; stores ID of fork() into the variable forkreturn. Then fork() is made.
* Buffer[10] is made which is same for both parent and child process. It is storing temporary data as it contains “CHILD” in Child process and “PARENT” in Parent Process
* In THIS IF-ELSE condition “forkreturn>0” is running first for some reason. Normally child runs before parent process.
  + NOW as We move into the parent process, we see statement is running 5 times with the help of for loop
    - IT PRINTS buffer which we saved “PARENT” and then number. As we declared it 0 above. It will print PARENT0 five times
  + NOW we go into the child process. It does the same things, firstly copying “CHILD’ into buffer. Then 5 times running loop
    - In this case, the mynum is incrementing by 1 every loop. So the loop will run 5 times with output like “CHILD0 CHILD1 and so on”