

Diff command compare files line by line and finds differences of files. I picked this command and option because diff command is help us to save too much time. Since, comparing files is not easy to handle with code. Therefore, different steps to do it. For option, I chose "-q" since if we use default differ, it will give unnecessary message if files are same. In -q option, it will report if there is any difference. And summarizing which files is differ.

Hierarchy : I added fork to SHELL which is main function. Fork creates new process. After fork point, there are two processes run program. They are parent and child. Then, I added wait to parent since it needs to wait end process of child. If, parent finishes before child come. It is problem. Therefore, I added wait. Then, I added one more fork to child since I need 2 execution. Then, I have child and grandchild. I need to execute command separately. I execute one in child and other one in grandchild. I used pipe for communication between processes. I give output of process to another process as a input. I closed pipe which according to changing STDIN_FILENO and STDOUT_FILENO values in program. In last one, I send output to output.txt.