Waleed Sawan 251085963

Pre-Order:

In pre-order, you simply enough want to go through starting at the topmost node and work out down the left end as far as possible, then go back one and see if there is a right node going that way too. This process is repeated until the right-most:

1. /user/rt/courses/; **we record the root node first**
2. /user/rt/courses/cs016/; **this is the leftmost node of the parent user/rt/courses. After visiting this one, we can go into its children.**
3. /user/rt/courses/cs016/grades/: **this is the leftmost node of the parent user/rt/courses/cs016/. After visiting this one, we can go into its children. We recognize that there aren't any child nodes, so we go back to cs/016/.**
4. /user/rt/courses/cs016/homework/: **once returning to cs016/ it was observed that there are still 2 more child nodes. The leftmost of which is homework/. After visiting this one, we can go into its children.**
5. /user/rt/courses/cs016/homework/hw1: **this is the leftmost child node of homework, so we can visit this one first. Checking to see if there any further children, we notice that there aren't any.**
6. /user/rt/courses/cs016/homework/hw2: **this is another child node of homework and the leftmost child that hasn't been visited yet. Once again, no children on this node.**
7. /user/rt/courses/cs016/homework/hw2: **this is the final child node of homework and the leftmost child that hasn't been visited yet. Once again, no children on this node.**
8. /user/rt/courses/cs016/programs/: **once returning to cs016/ it was observed that there is still a child node. The leftmost of which are programs/. After visiting this one, we can go into its children.**
9. /user/rt/courses/cs016/programs/pr1: **this is the leftmost child node of programs, so we can visit this one first. Checking to see if there any further children, we notice that there aren't any.**
10. /user/rt/courses/cs016/programs/pr2: **this is another child node of programs and the leftmost child that hasn't been visited yet. Once again, no children on this node.**
11. /user/rt/courses/cs016/programs/pr3: **this is the final child node of programs and the leftmost child that hasn't been visited yet. Once again, no children on this node.**
12. /user/rt/courses/cs252/; **after recognizing that all of the child nodes cs016/ have been visited, we can then go back to the root node of user/rt/courses/ and proceed to the remaining left-most child node.**
13. /user/rt/courses/cs252/projects/: **this is the leftmost node of the parent user/rt/courses/cs252/. After visiting this one, we can go into its children.**
14. /user/rt/courses/cs252/projects/papers: **this is the leftmost node of the parent user/rt/courses/cs252/projects/papers. After visiting this one, we can go into its children.**

15. /user/rt/courses/cs252/projects/papers/buylow: **this is the leftmost child node of papers, so we can visit this one first. We then proceed to visit the leftmost remaining children.**
16. /user/rt/courses/cs252/projects/papers/sellhigh: **this is the leftmost child node of papers that we haven't visited yet, so we can visit this one first. We then proceed to visit the leftmost remaining children. We notice that there aren't any remaining, so we can go back up to visiting "projects" children nodes.**
17. /user/rt/courses/cs252/projects/demos/: **this is the leftmost child node of demos that we haven't visited yet, so we proceed to visit this one. We proceed to any child nodes of demos.**
18. /user/rt/courses/cs252/projects/demos/market: **this is the only child node of demos, so upon visiting this node, we can proceed to go back up to projects/. It is noticed that there aren't any remaining child nodes to projects, so we go back up to cs252/.**
19. /user/rt/courses/cs252/grades: **this is the leftmost child node of cs252 that we haven't visited yet, so we can visit this one first. We then proceed to visit the leftmost remaining children. We notice that there aren't any remaining, so we have visited all the nodes, as cs252 is the right most parent and grades is the right most child.**

Post-Order:

In post-order, you simply enough want to go through starting at the bottom nodes and then working your way up. You record every child node before recording the parent node. For this scenario:

1. /user/rt/courses/cs016/grades; **lowest and left most node in each of the sequences don't visit /user/rt/courses/cs016 as more child nodes of this parent have not been visited (eg. hw1, pr1, programs, etc.)**
2. /user/rt/courses/cs016/homework/hw1; **subsequently, we go to visit the next lowest left most node, which in this case is hw1**
3. /user/rt/courses/cs016/homework/hw2; **similarly, we visit hw2**
4. /user/rt/courses/cs016/homework/hw3; **similarly, we visit hw3**
5. /user/rt/courses/cs016/homework/; **all child nodes of homework have been visited, so now we can visit the parent node of homework**
6. /user/rt/courses/cs016/programs/pr1; **subsequently, we go to visit the next lowest left most node, which in this case is pr1**
7. /user/rt/courses/cs016/programs/pr2; **similarly, we visit pr2**
8. /user/rt/courses/cs016/programs/pr3; **similarly, we visit pr3**
9. /user/rt/courses/cs016/programs/; **all child nodes of programs have been visited, so now we can visit the parent node of programs**
10. /user/rt/courses/cs016/; **all child nodes of cs016 have been visited, so now we can visit the parent node of cs016**
11. /user/rt/courses/cs252/projects/papers/buylow; **subsequently, we go to visit the next lowest left most node, which in this case is buylow**
12. /user/rt/courses/cs252/projects/papers/sellhigh; **similarly, we visit sellhigh**
13. /user/rt/courses/cs252/projects/papers/; **all child nodes of papers have been visited, so now we can visit it**
14. /user/rt/courses/cs252/projects/demos/market; **subsequently, we go to visit the next lowest left most node, which in this case is market**
15. /user/rt/courses/cs252/projects/demos/; **all child nodes of demos have been visited, so now we can now visit it**
16. /user/rt/courses/cs252/projects/; **all child nodes of projects have been recorded, so now we can record it**
17. /user/rt/courses/cs252/grades/; **similarly, we visit grades**
18. /user/rt/courses/cs252/; **all child nodes of cs252 have been recorded, so now we can record it**
19. /user/rt/courses/; **all child nodes of /user/rt/courses/ have been recorded, so now we can record it**