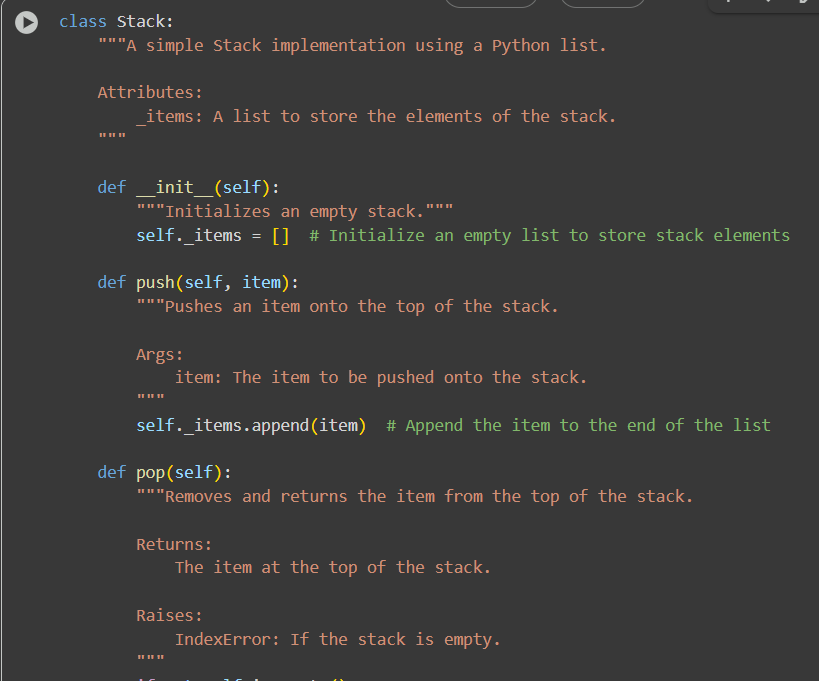
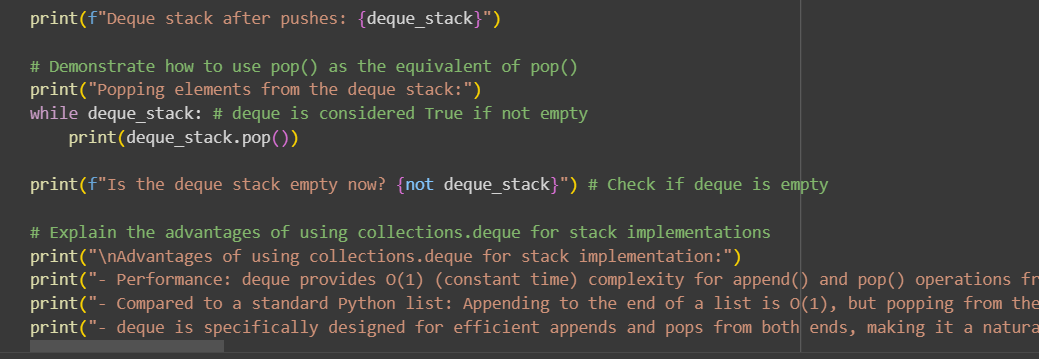
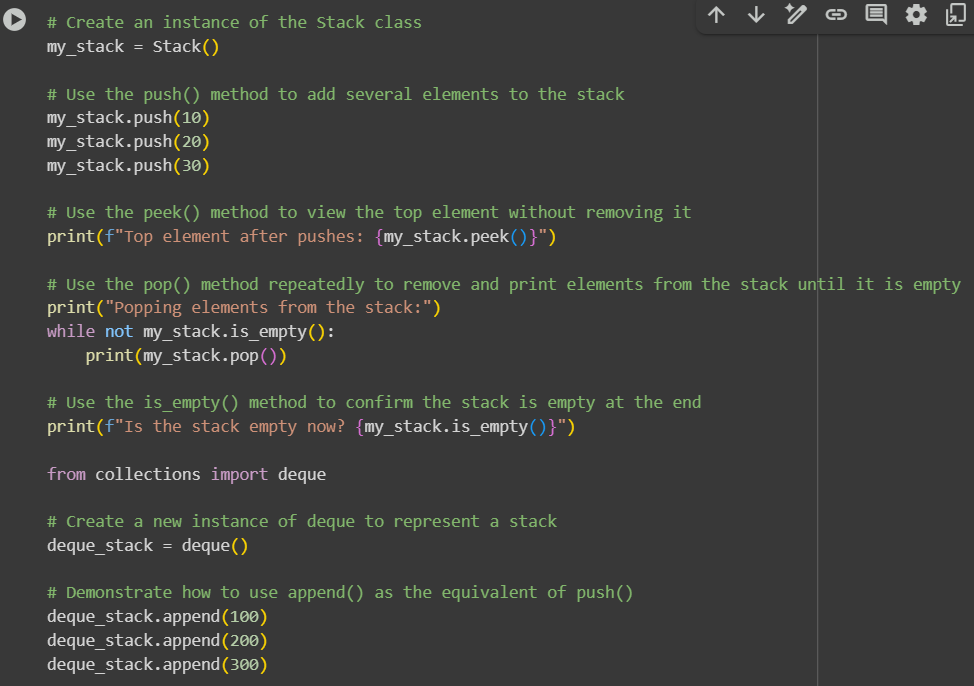
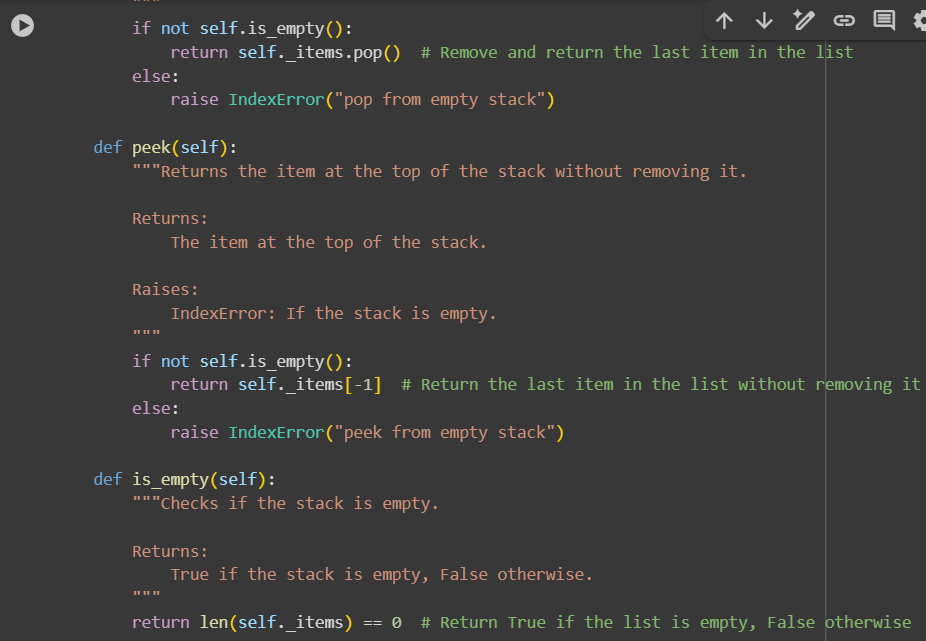
AI ASSISTED CODING 11.4

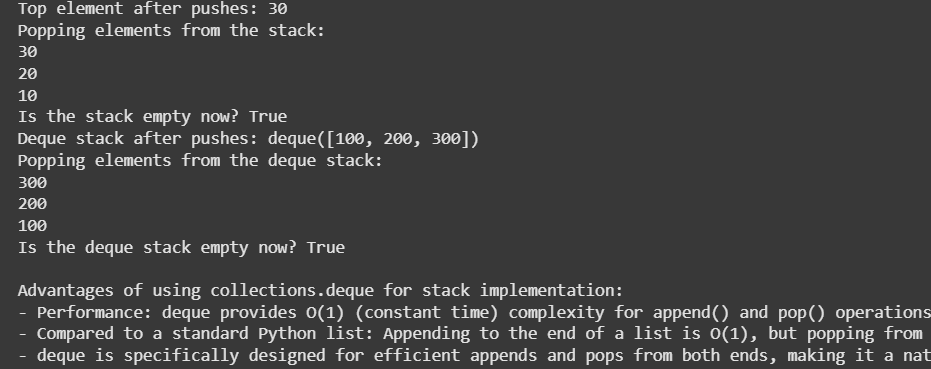
NAME:TAHIYA MAHEROZE

ROLLNO:2403A52349

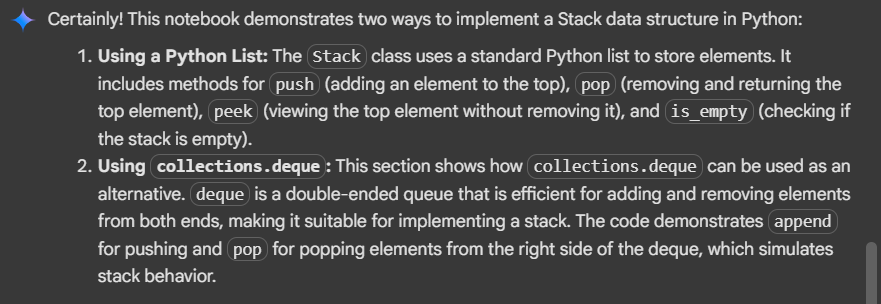
Task1: write a python program of Stack class in Python with the following operations: push(), pop(), peek(), and is\_empty().



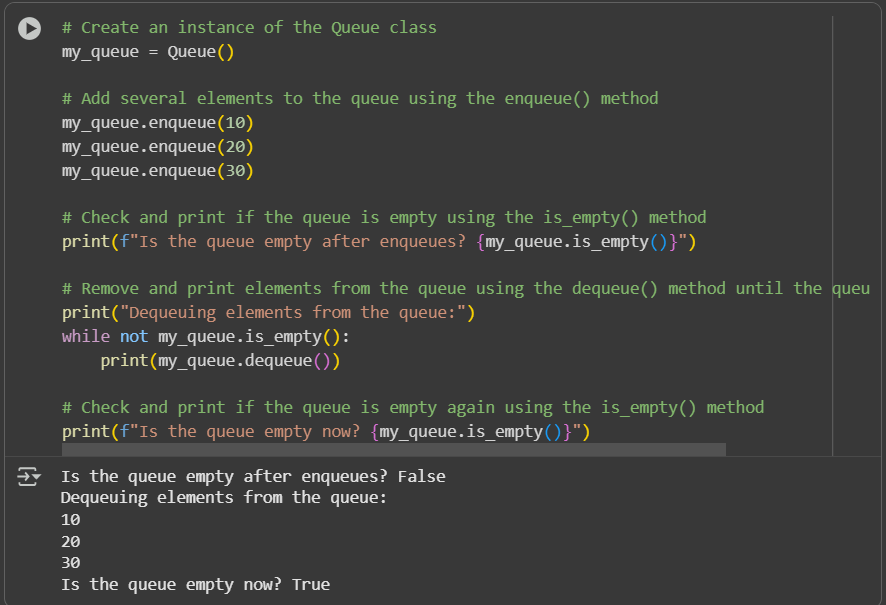
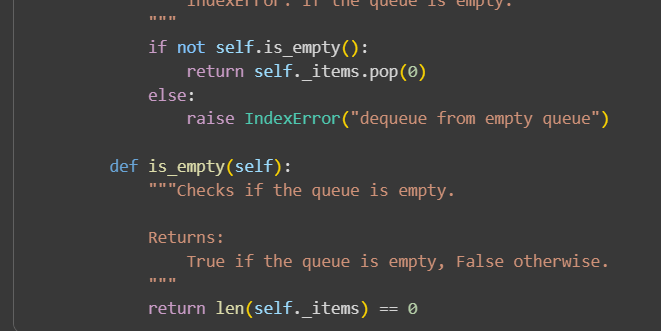
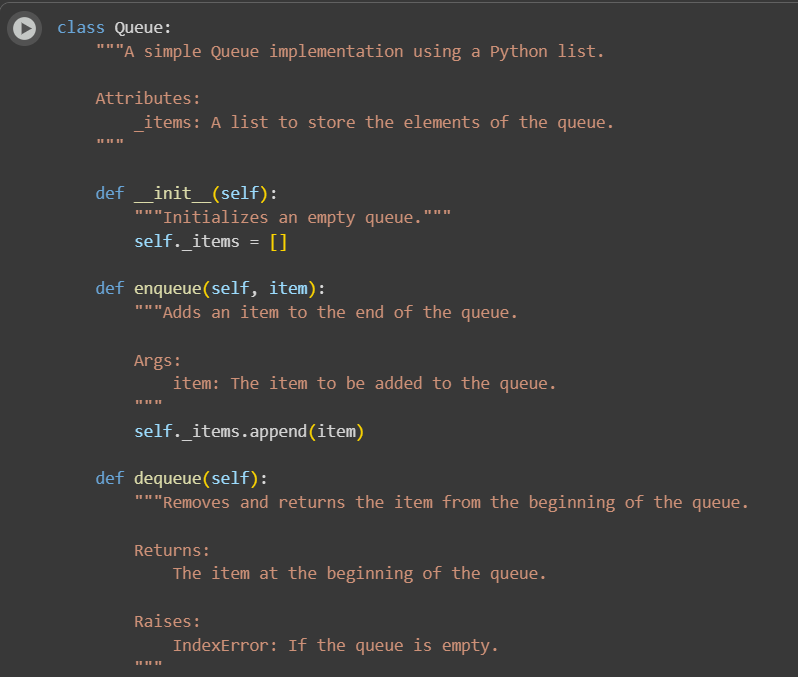
Output:



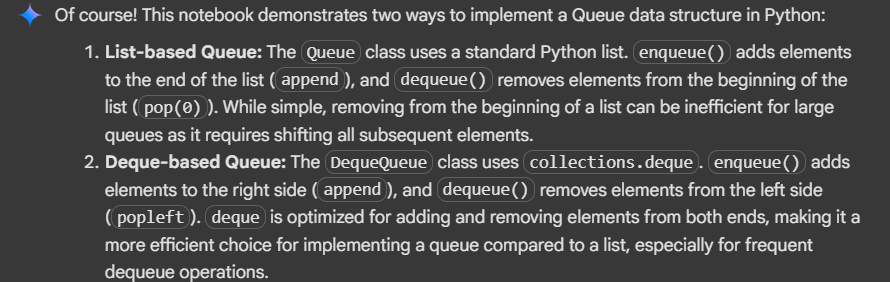
Explaination:



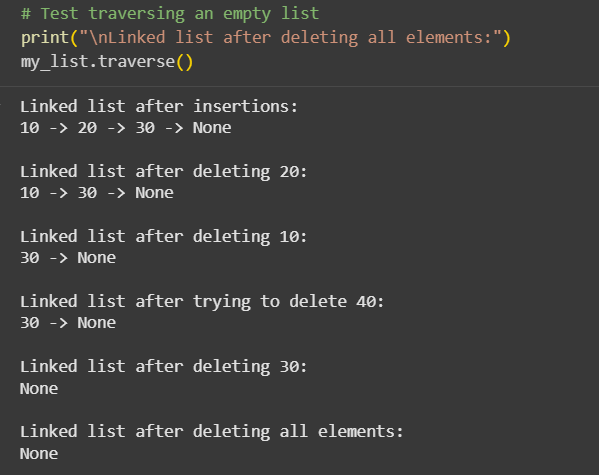
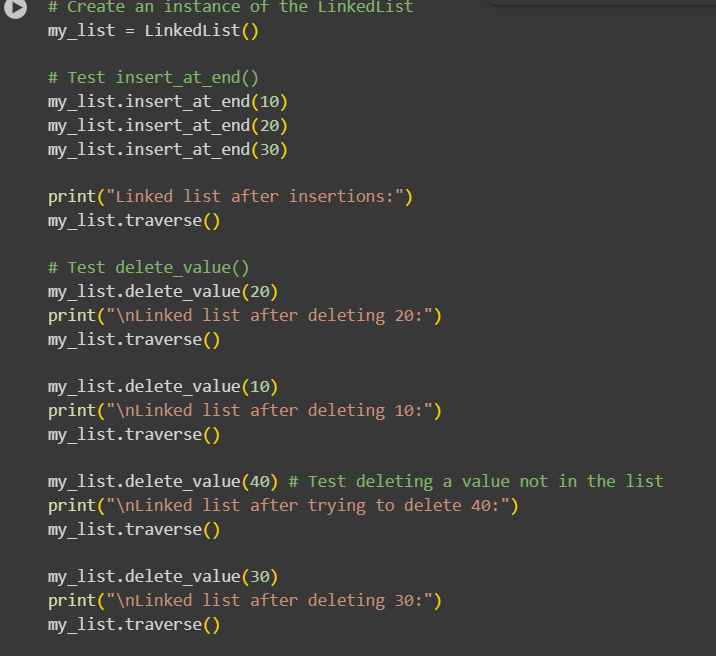
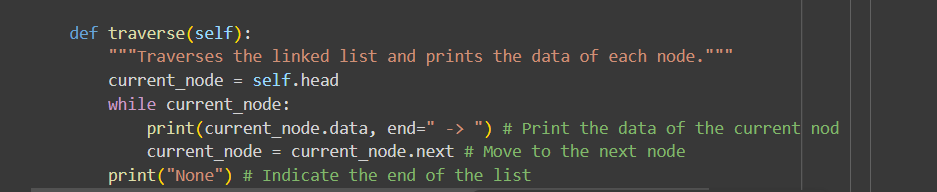
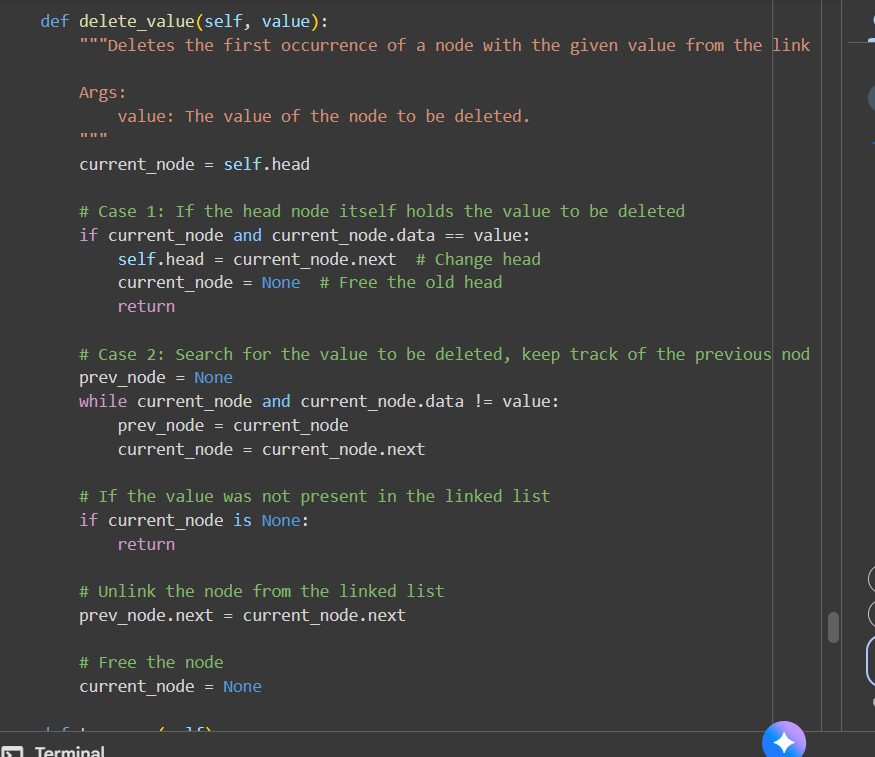
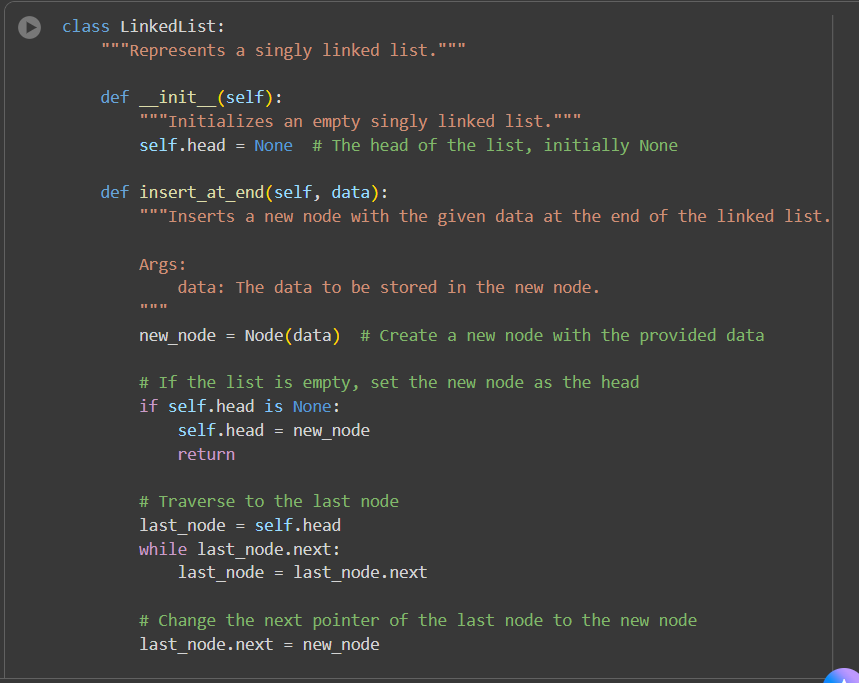
Task2: write a python program to Implement a Queue with enqueue(), dequeue(), and is\_empty() methods.



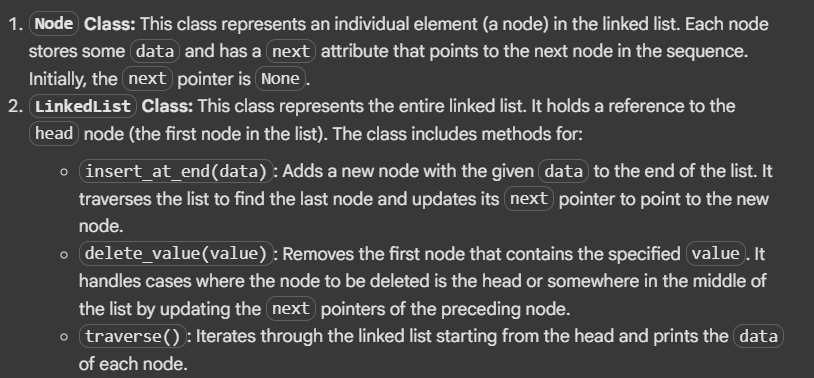
Explaination:



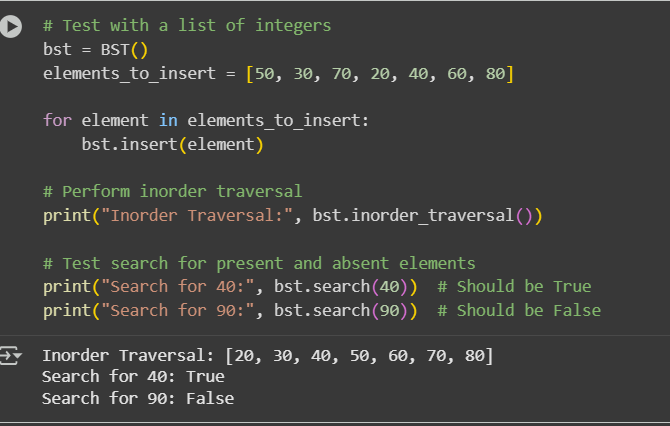
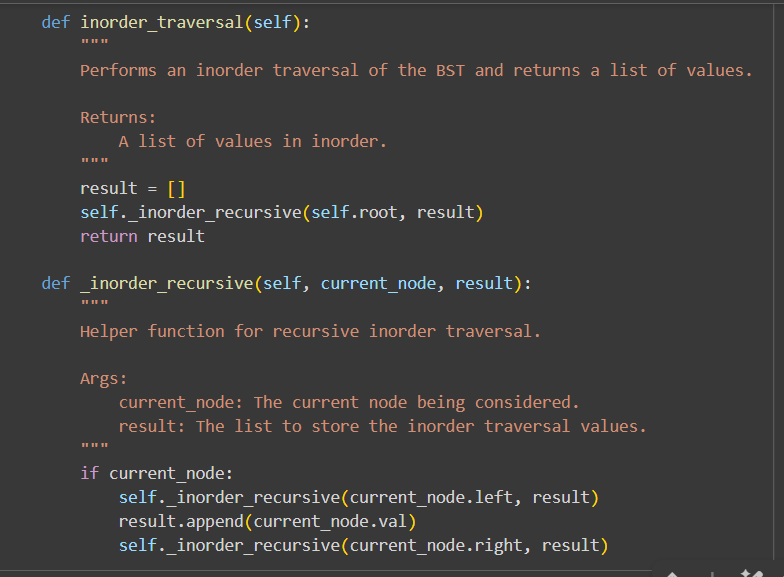
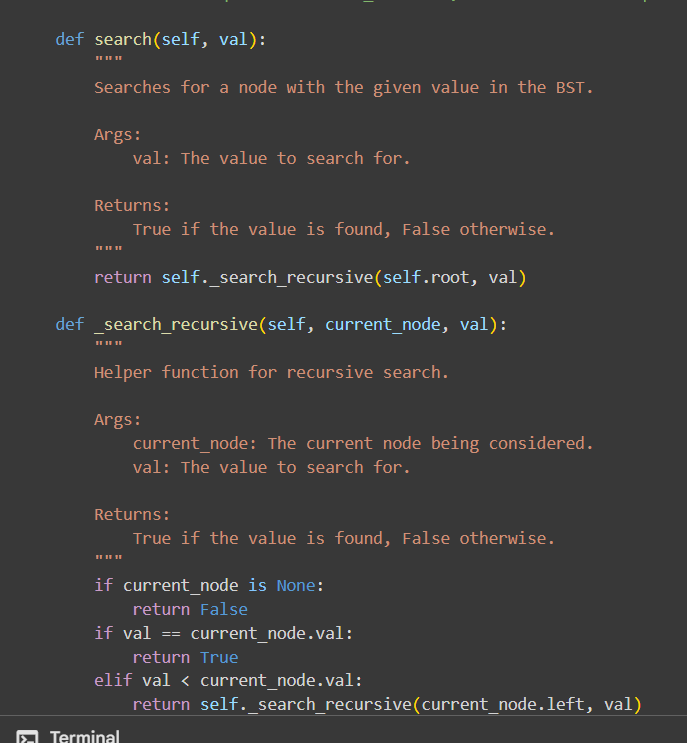
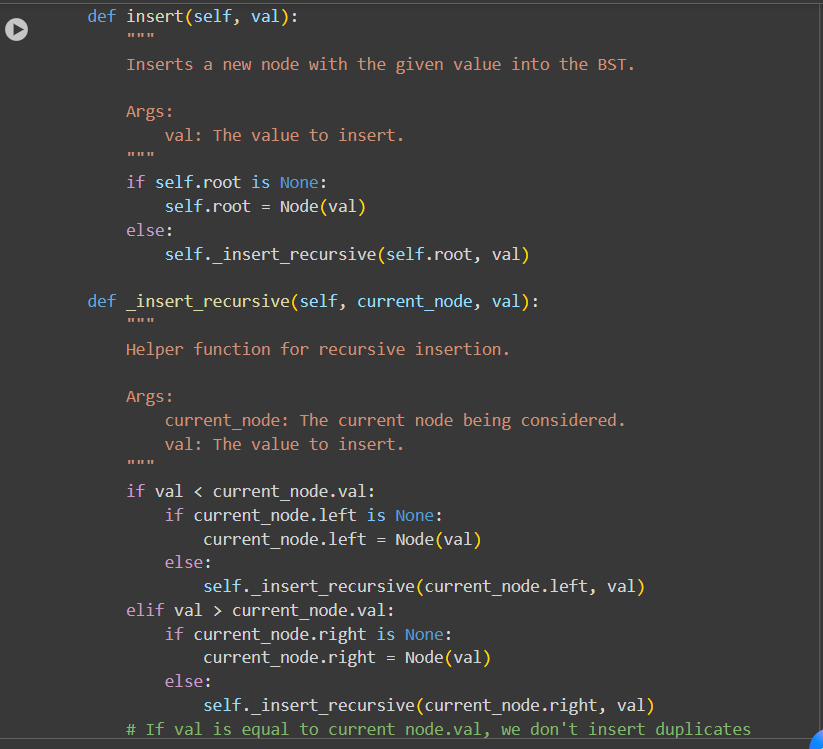
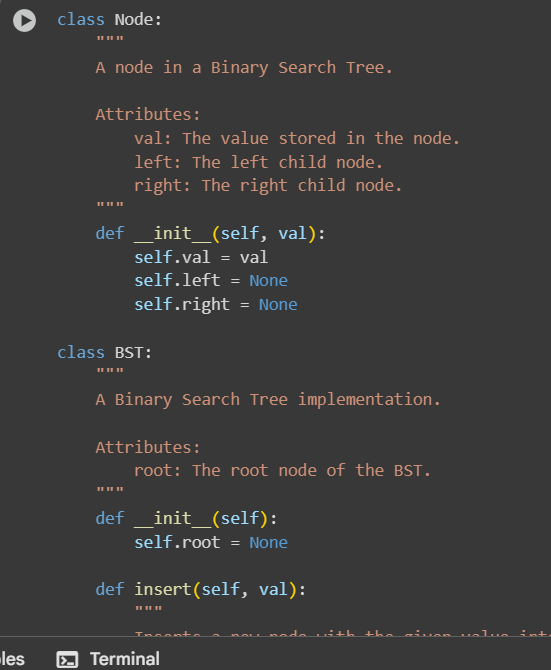
Task3: write a python program that Implement a Singly Linked List with operations: insert\_at\_end(), delete\_value(), and traverse().



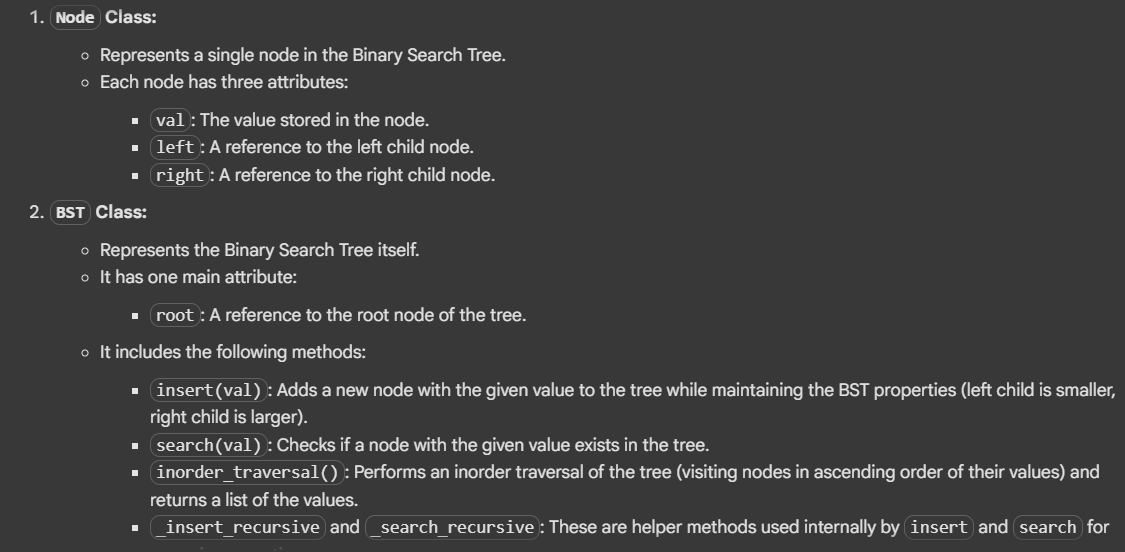
Explaination:

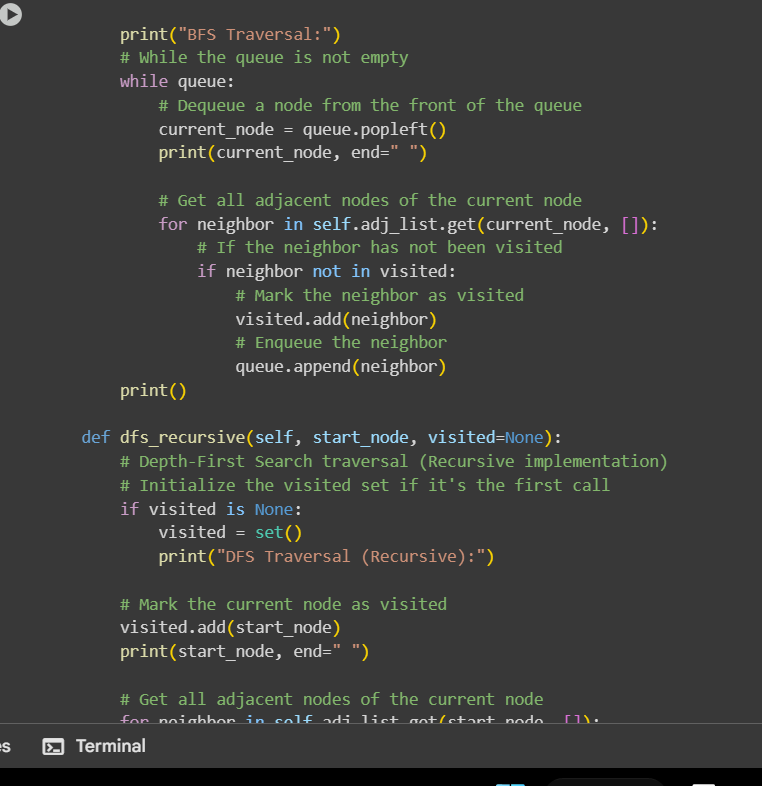


Task4: write a python program Implement a Binary Search Tree with methods for insert(), search(), and inorder\_traversal().



Explaination:



Task5: write a python program to Implement a Graph using an adjacency list, with traversal methods BFS() and DFS().

