

**Program :**B.tech(CSE)

**Specialization :**AIML

**Course Title :**AI Assisted Coding

**Course Code :**24CS002PC215

**Semester :**3rd semester

**Academic Session :**2025-2026

**Name of Student :**Challa Sravya

**Enrollment No. :**2403A52033

**Batch No. :**02

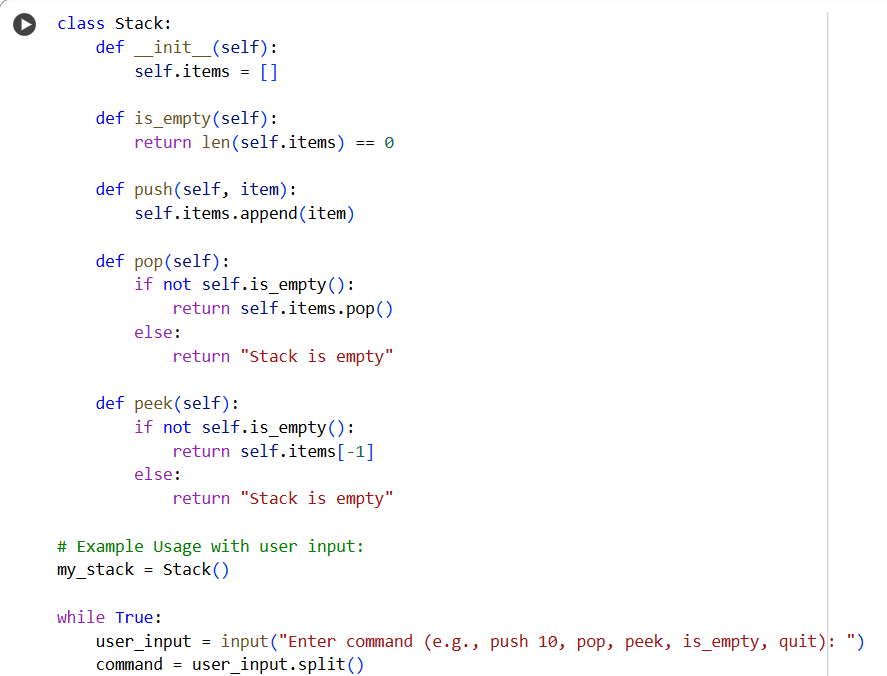
**Date :**07/10/2025

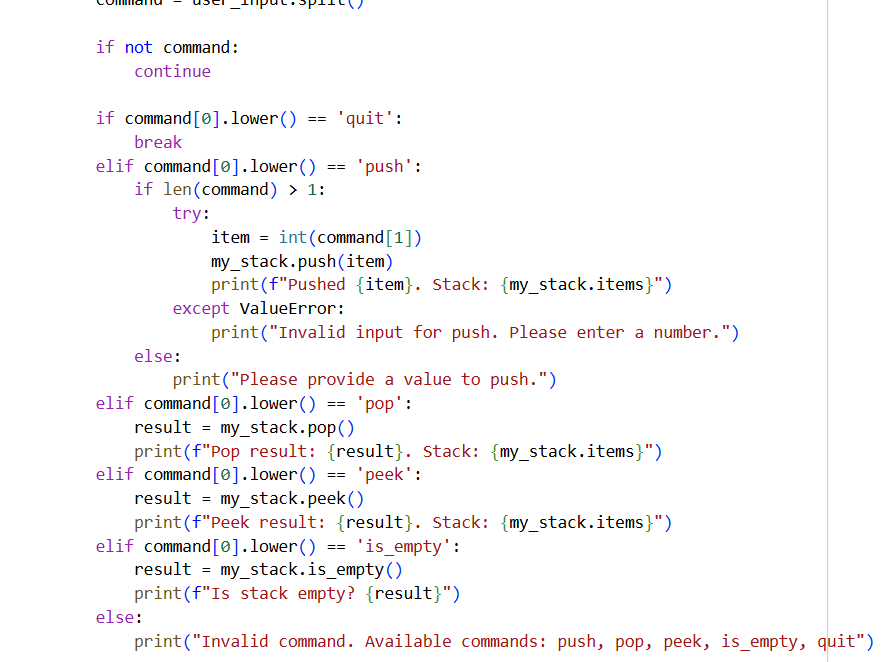
LAB ASSIGNMENT-11.3

TASK DESCRIPTION-1: Stack class implementation  
Task: Ask AI to implement a stack class with push(), pop(), peek() and  
is\_empty() methods

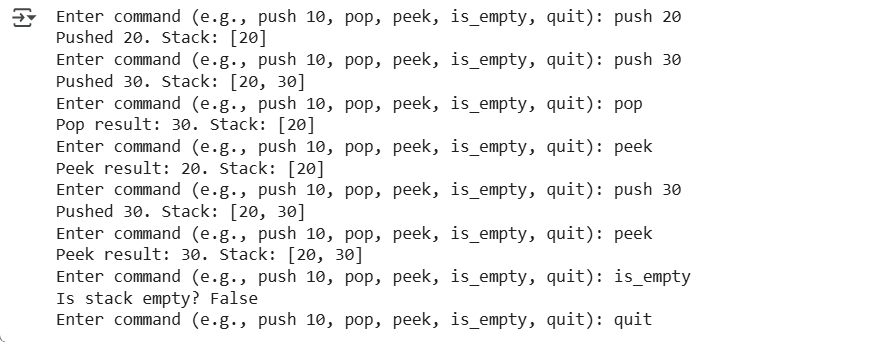
Prompt:- create a python class that implement a stack class with push(), pop(), peek() and is\_empty() methods with user input

Code:-





Output:-

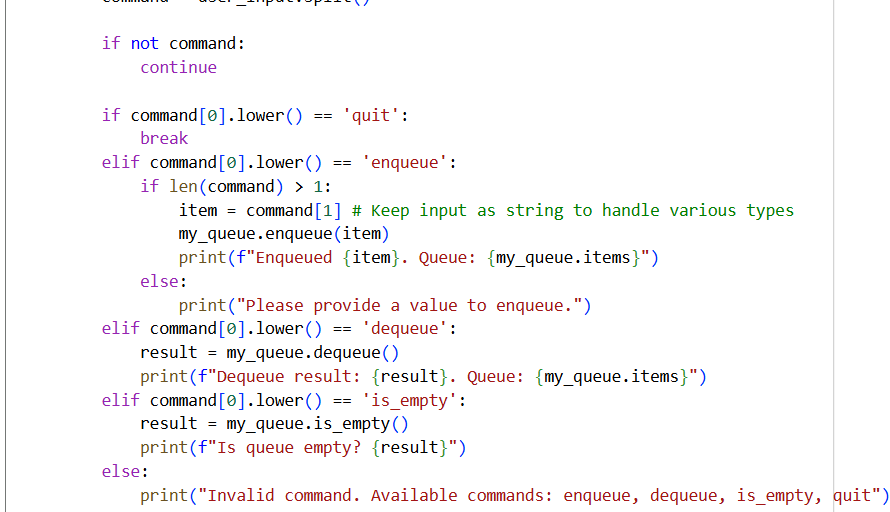


TASK DESCRIPTION-2: Queue Implementation  
Task: Use AI to generate a Queue class with enqueue(), dequeue(), and  
is\_empty()

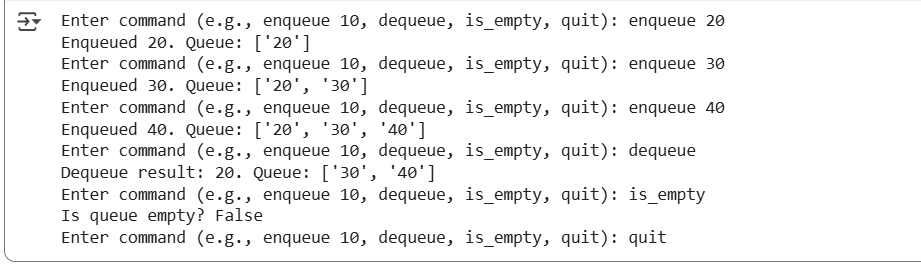
Prompt: Create a python class that generate a Queue class with enqueue(), dequeue(), and is\_empty() with user input

Code:





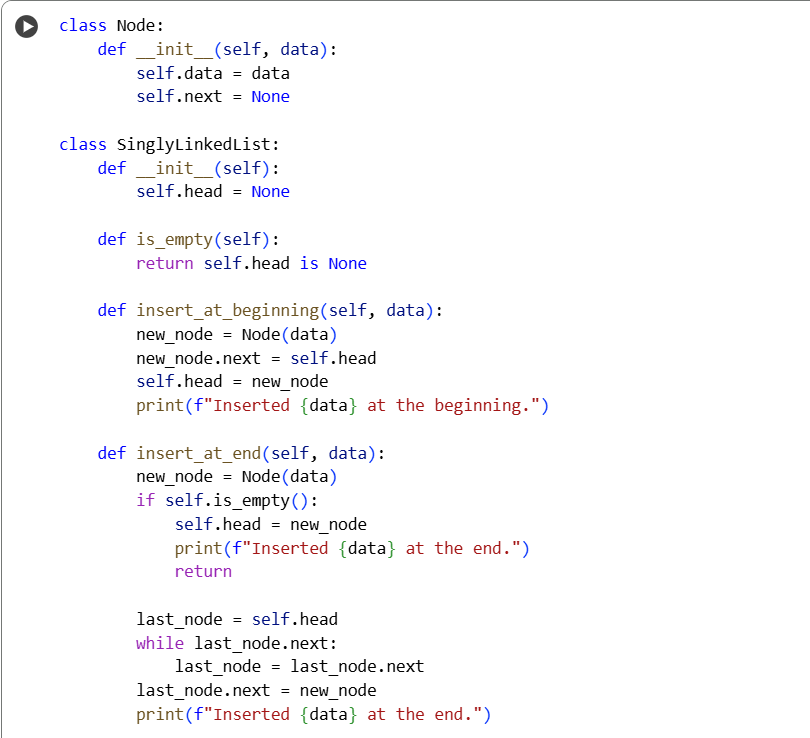
Output:

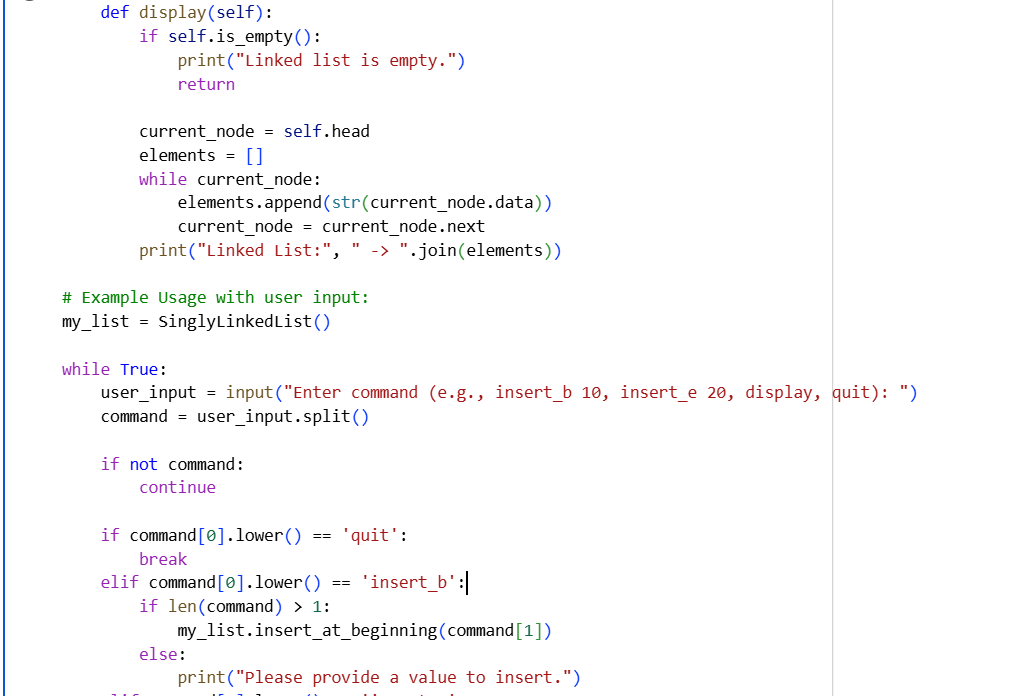


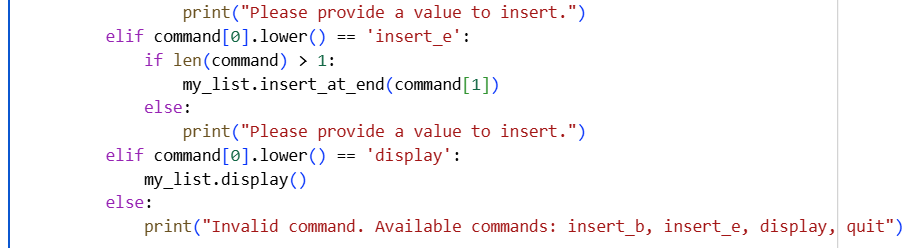
TASK DESCRIPTION-3: Linked List Implementation  
Task: Ask AI to create a singly linked list with insert\_at\_end(),  
insert\_at\_beginning(), and display()

Prompt: Create a python class that create a singly linked list with insert\_at\_end(), insert\_at\_beginning(), and display() with user input

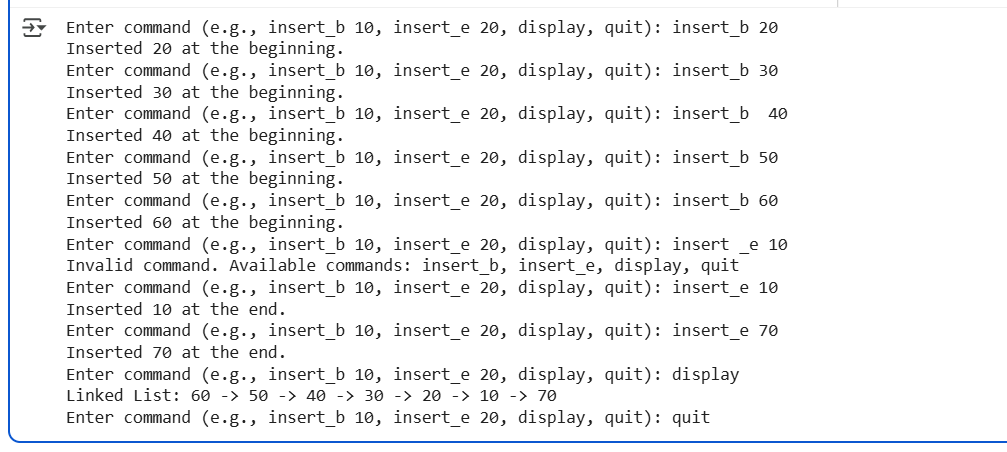
Code:







Output:



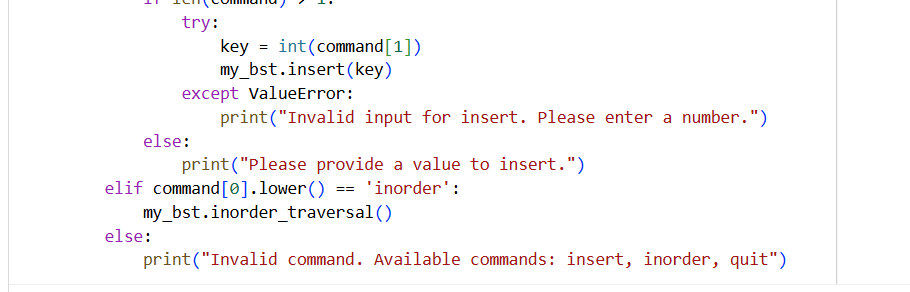
TASK DESCRIPTION-4: Binary Search Tree (BST)  
Task: Ask AI to generate a simple BST with insert() and  
inorder\_traversal().

Prompt: Create a python class to generate a simple BST with insert() and inorder\_traversal() with user input

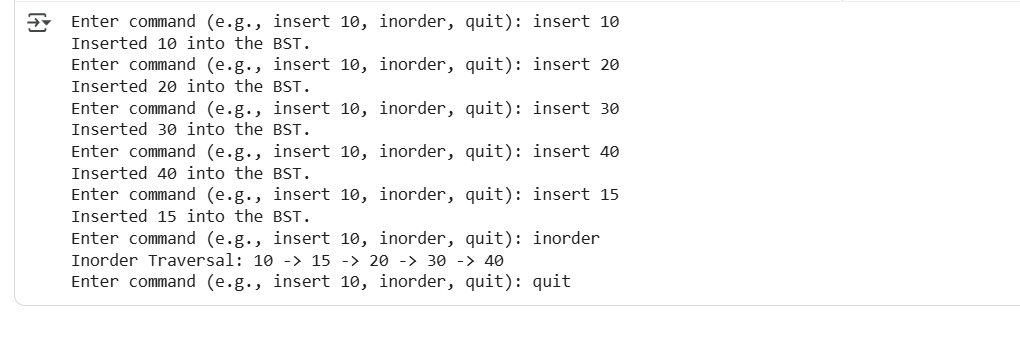
Code:







Output:



THANK YOU