

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

**Specialization :**AIML

**Course Title :**AI Assisted Coding

**Course Code :**24CS002PC215

**Semester :**3rd semester

**Academic Session :**2025-2026

**Name of Student :**Kaveti Manohar

**Enrollment No. :**2403A52079

**Batch No. :**02

**Date :**07/10/2025

#LAB ASSIGNMENT

Task Description -1:

Task: Ask AI to implement a stack class with push(), pop(), peek() and  
is\_empty() methods

PROMPT:

Write a Python program that implements a Stack class with push(), pop(), peek(), and is\_empty() methods.The program should take user input to perform stack operations (like push, pop, peek, or check if empty) until the user chooses to exit.Display clear messages for each action and show the stack after every operation.

Question:

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Code:

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OUTPUT:

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AI-generated content may be incorrect.

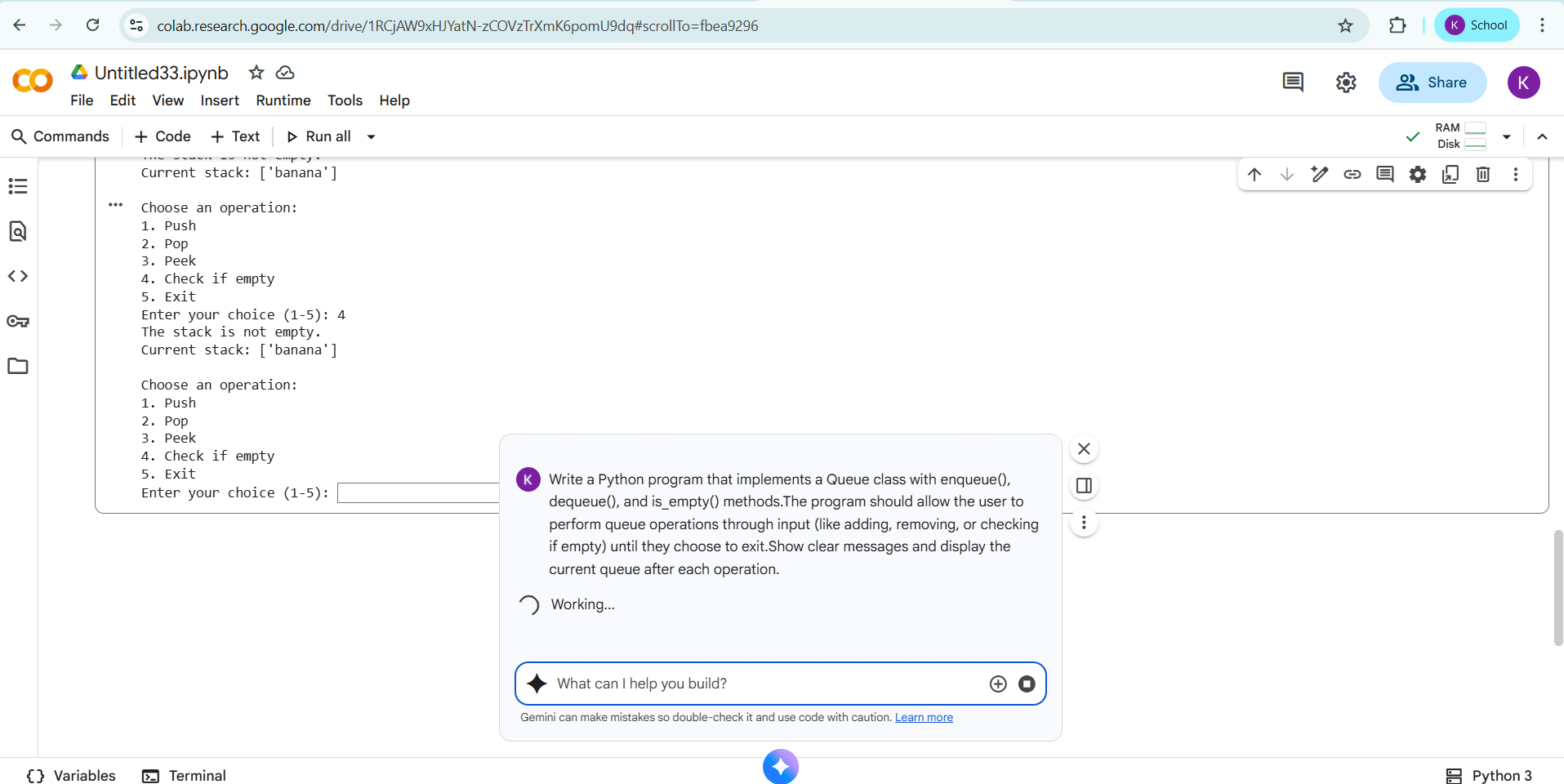
TASK Description-2:

Task: Use AI to generate a Queue class with enqueue(), dequeue(), and  
is\_empty().

PROMPT:

Write a Python program that implements a Queue class with enqueue(), dequeue(), and is\_empty() methods.The program should allow the user to perform queue operations through input (like adding, removing, or checking if empty) until they choose to exit.Show clear messages and display the current queue after each operation.

Question:



Code:

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OUTPUT:

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TASK Desciption-3:

Task: Ask AI to create a singly linked list with insert\_at\_end(),  
insert\_at\_beginning(), and display().

PROMPT:

Write a Python program that creates a Singly Linked List class with methods insert\_at\_beginning(), insert\_at\_end(), and display().The program should take user input to perform these operations until the user chooses to exit.Show clear messages and display the linked list after each operation.

QUESTION: A screenshot of a computer

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Code:

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OUTPUT:

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TASK Desciption-4:

Task: Ask AI to generate a simple BST with insert() and  
inorder\_traversal().

PROMPT:

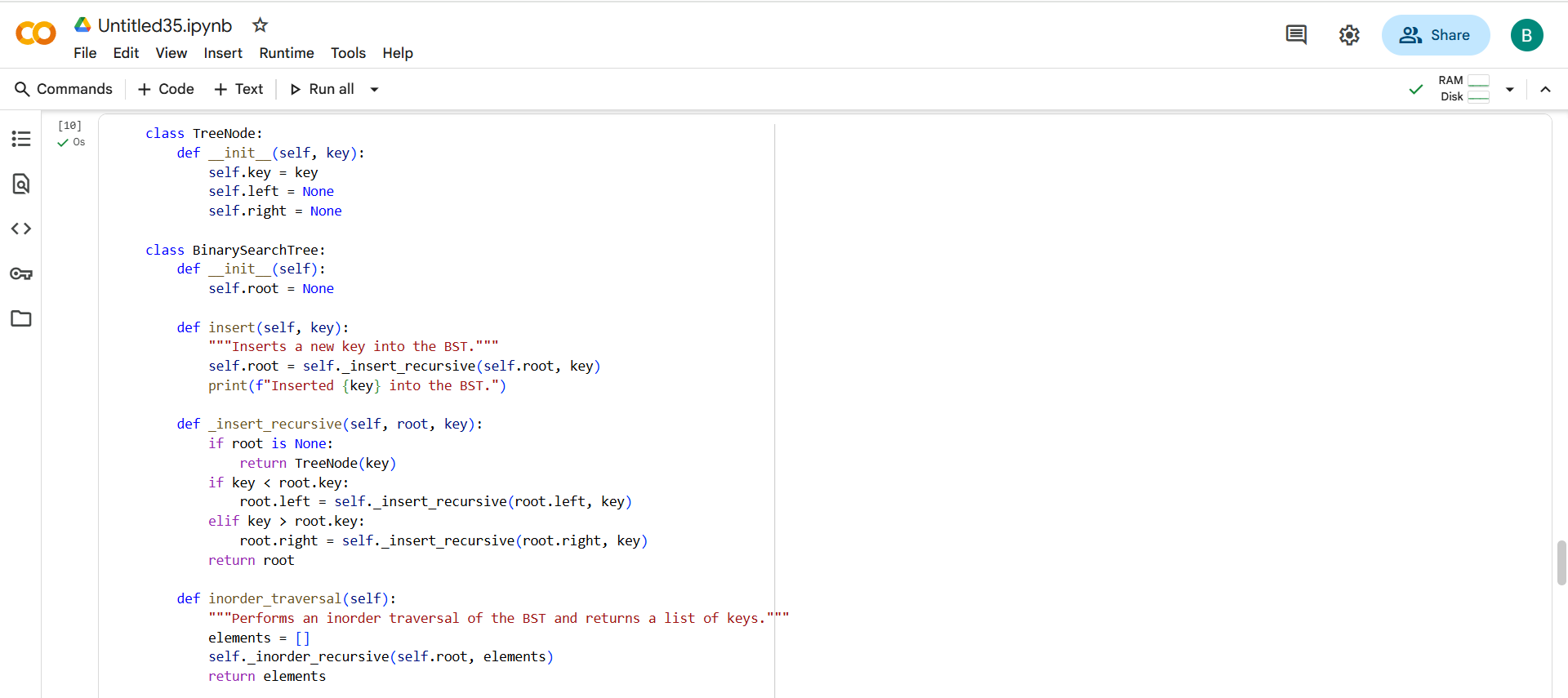
Write a Python program that implements a simple Binary Search Tree (BST) with insert() and inorder\_traversal() methods.The program should allow the user to insert elements into the tree using input and then display the inorder traversal of the BST.Show clear messages for each operation.

QUESTION:

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CODE:



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A screenshot of a computer

AI-generated content may be incorrect.

OUTPUT:

A white rectangular object with blue lines

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---------------THANK YOU-----------