

# AI ASSISTED CODING

## LAB ASSIGNMENT – 6.5

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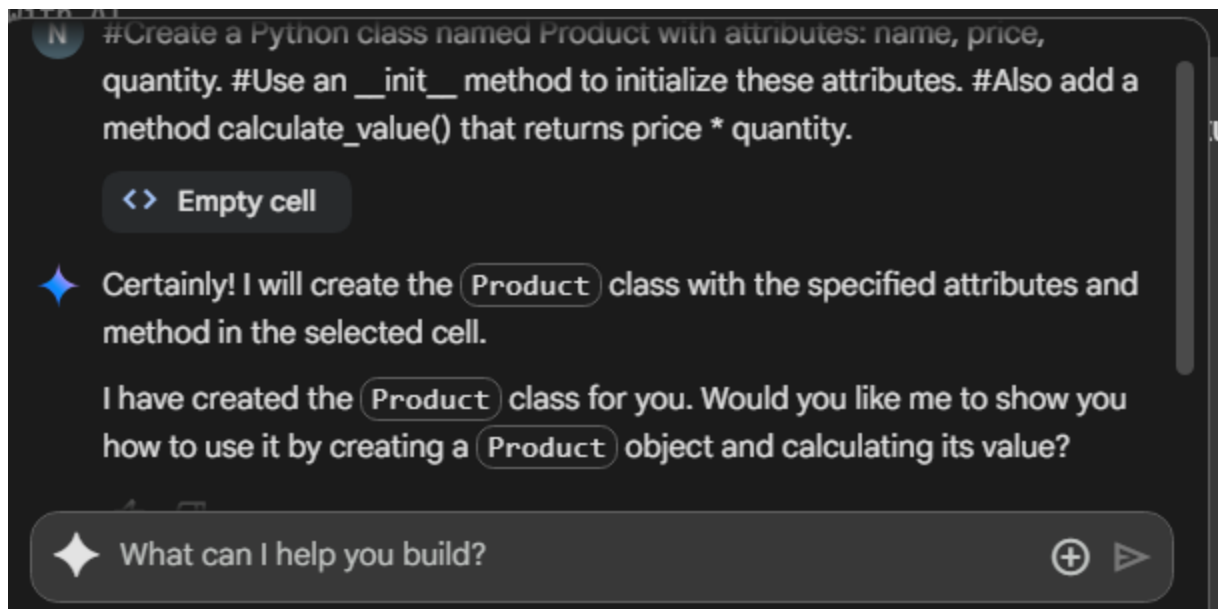
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### #TASK-1

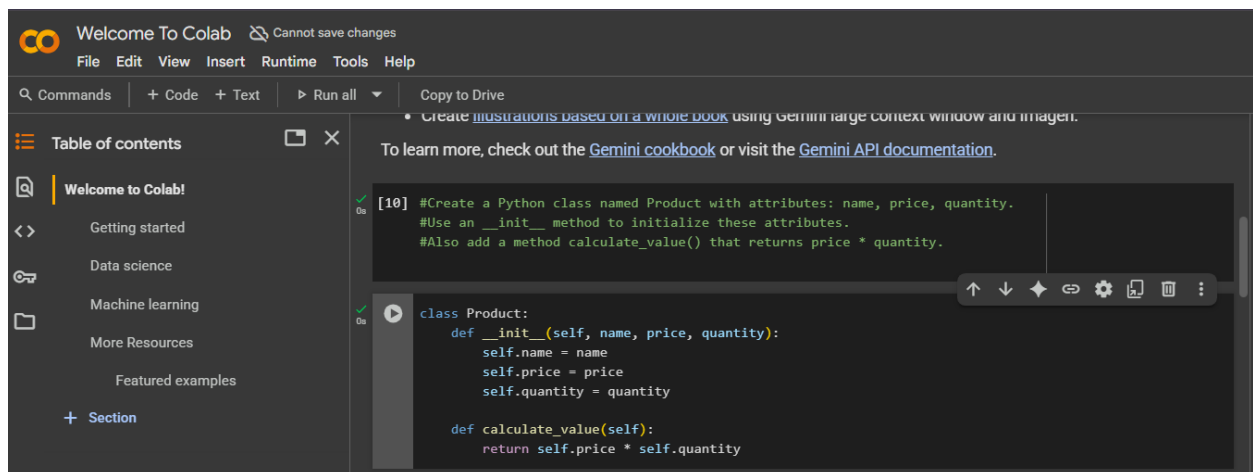
Class Design Using AI Assistance:

- Begin defining a Product class with attributes: name, price, quantity.
- Use the AI suggestion feature to automatically complete the `__init__()` method.
- Add a method `calculate_value()` to return `price * quantity`.

**PROMPT:**



## OUTPUT:

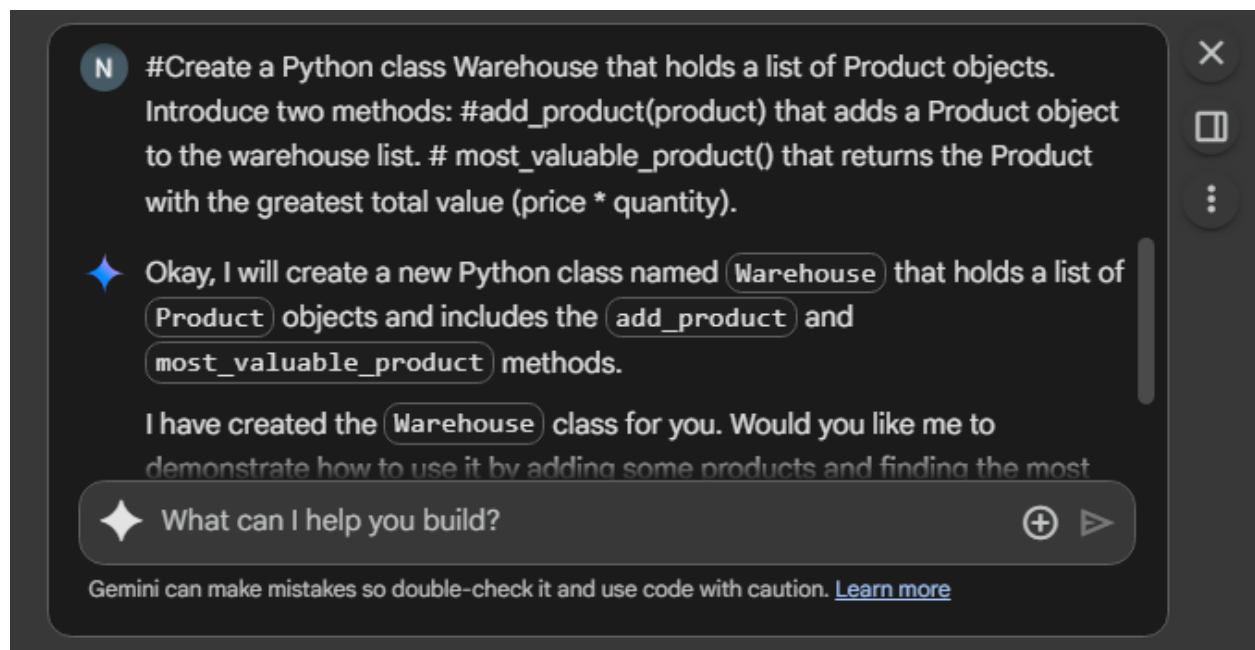


## #TASK-2

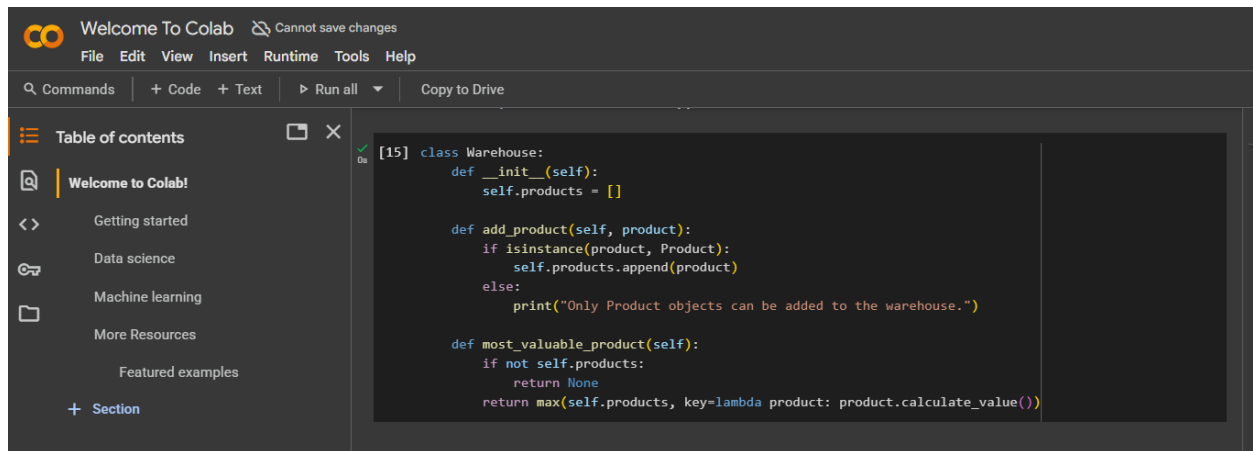
Define a Warehouse class with a list of Product objects.

- Use code completion to help implement:
  - A method to add a product.
  - A method to display the most valuable product.

## PROMPT:



## OUTPUT:

A screenshot of a Google Colab notebook interface. The top bar shows 'Welcome To Colab' and a warning 'Cannot save changes'. Below the menu bar (File, Edit, View, Insert, Runtime, Tools, Help), there's a toolbar with 'Commands', '+ Code', '+ Text', 'Run all', and 'Copy to Drive'. On the left, a 'Table of contents' sidebar lists 'Welcome to Colab!', 'Getting started', 'Data science', 'Machine learning', 'More Resources', and 'Featured examples'. The main code editor area shows a Python class definition for 'Warehouse' at cell [15]. The code includes an initialization method, an add\_product method with an isinstance check, and a most\_valuable\_product method using max with a lambda function.

```
[15] class Warehouse:
    def __init__(self):
        self.products = []

    def add_product(self, product):
        if isinstance(product, Product):
            self.products.append(product)
        else:
            print("Only Product objects can be added to the warehouse.")

    def most_valuable_product(self):
        if not self.products:
            return None
        return max(self.products, key=lambda product: product.calculate_value())
```

## SUMMARY:

In this task, I had to create two classes in Python: Product and Warehouse. The Product class had name, price, and quantity, and a method to calculate total value. The Warehouse class had to keep a list of products, allow adding new products, and show the most valuable product.

I used Git Hub Copilot for this. When I started writing the code, Copilot gave me suggestions automatically. It was a useful and time-saving experience.