

## # task-1

```
In [15]: class student:
          def __init__(val, student_name, marks):
              val.student_name = student_name
              val.marks = marks
          student = student("faiz raza", 80)
          print("original class: ")
          print(student.student_name)
          print(student.marks)

          student.student_name = "Gufi"
          student.marks = 30

          print("modified class: ")
          print(student.student_name)
          print(student.marks)
```

```
original class:
faiz raza
80
modified class:
Gufi
30
```

## ## task-2



```
In [16]: class Restaurant:
    def __init__(self):
        self.menu_items = []
        self.book_table = []
        self.customer_orders = []

    def add_item_to_menu(self, item_name, price):
        self.menu_items.append({"item_name": item_name, "price": price})

    def book_tables(self, table_number):
        self.book_table.append(table_number)

    def customer_order(self, table_number, item_name):
        self.customer_orders.append({"table_number": table_number, "item_name": item_name})

    def print_menu(self):
        print("Menu:")
        for item in self.menu_items:
            print(f"- {item['item_name']}: ${item['price']}")

    def print_table_reservations(self):
        print("Table Reservations:")
        for table_number in self.book_table:
            print(f"- Table {table_number}")

    def print_customer_orders(self):
        print("Customer Orders:")
        for order in self.customer_orders:
            print(f"- Table {order['table_number']}: {order['item_name']}")

# Create an instance of the Restaurant class
restaurant = Restaurant()

# Add items to the menu
restaurant.add_item_to_menu("Pizza", 10)
restaurant.add_item_to_menu("Burger", 8)
restaurant.add_item_to_menu("Salad", 6)

# Make table reservations
restaurant.book_tables(1)
restaurant.book_tables(2)
restaurant.book_tables(3)

# Take customer orders
restaurant.customer_order(1, "Pizza")
restaurant.customer_order(2, "Burger")
restaurant.customer_order(3, "Salad")

# Print the menu
restaurant.print_menu()

# Print table reservations
restaurant.print_table_reservations()

# Print customer orders
restaurant.print_customer_orders()
```

Menu:

- Pizza: \$10
- Burger: \$8
- Salad: \$6

Table Reservations:

- Table 1
- Table 2
- Table 3

Customer Orders:

- Table 1: Pizza
- Table 2: Burger
- Table 3: Salad

In [ ]: