

✓ Final Lab 02

Colab Link :

https://colab.research.google.com/drive/1ig_Tx8o1y0zVvdAaXDGj6E0nHI5WCfcl?authuser=1#scrollTo=PS2_Mobsa0fO

```
class car:
    tax=4
    def __init__(self,color, model, seat_num, price):
        self.color = color
        self.model = model
        self.seat_num = seat_num
        self.price = price

    def display(self):
        print("Color: ", self.color)
        print("Model: ", self.model)
        print("Seat Number: ", self.seat_num)
        print("Price: ", self.price)
    @classmethod
    def change_tax(cls, tax): # cls for class methods
        cls.tax = tax

    @staticmethod
    def check_price(price):
        if price > 20000000:
            return True
        else:
            return False
audi= car("Red","X6", 4, 30000000)
bmw = car("Blue", "X7", 6, 40000000)
audi.display()
bmw.display()
car.check_price(audi.price)
```

```
→ Color: Red
Model: X6
Seat Number: 4
Price: 30000000
Color: Blue
Model: X7
Seat Number: 6
Price: 40000000
True
```

✓ Problem 1

```
class Library:
    books={}
    totalbooks=0
    @classmethod
    def totalbooks_count(cls):
        return cls.totalbooks

    def add_books(self, title):
        if title in self.books.keys():
            self.books[title]+=1
        else:
            self.books[title]=1
            Library.totalbooks+=1

    def remove_books(self, title):
        if self.books[title]>0:
            self.books[title]-=1
            Library.totalbooks-=1
        else:
            print("Remove is not possible")

    def lend_books(self, title):
        if self.books[title]>0:
            self.books[title]-=1
            Library.totalbooks-=1
```

```

        else:
            print("Lend is not possible")

def return_books(self, title):
    self.books[title]+=1
    Library.totalbooks+=1

    @staticmethod
    def is_valid_isbn(isbn):
        x=len(str(isbn))
        if x >11 and isbn.isdigit():
            return True
        else:
            return False

book1= Library()
book1.add_books("book1")
book1.add_books("book1")
book1.add_books("book2")
book1.add_books("book2")
print(book1.books)

print()
book1.remove_books("book1")
book1.lend_books("book1")
book1.return_books("book1")
book1.lend_books("book1")
print(book1.books)
print(Library.totalbooks_count())
print(book1.books)

print(Library.is_valid_isbn("1547589545555"))
print(Library.is_valid_isbn("Adsh15478555"))

```

```

➡ {'book1': 2, 'book2': 2}
{'book1': 0, 'book2': 2}
2
{'book1': 0, 'book2': 2}
True
False

```