## Final Exam 20101482

## September 25, 2020

```
[]: #Question- 2
    class Car:
        count=0
        def __init__(self,name,year):
            self.name=name
            self.year=year
            Car.count+=1
        def add_Services(self,*services):
            self.services=services
        def printCarDetail(self):
            print("Name: {name}\nYear of manufacture: {year}".format(name=self.
     →name, year=self.year))
            print("List of services: ",end="")
            s=""
            for i in self.services:
               s=s+", "+i
            print(s[2:])
    print("No.of Car=", Car.count)
    c1 = Car('Lamborghini', 2002)
    c1.add_Services('Battery Replacement', 'A/C Recharge')
    c2 = Car('Toyota Corolla', 2016)
    c2.add_Services('Radiator Flush', 'Fill Service')
    c3 = Car('Mitsubishi Pajero', 2018)
    c3.add_Services('Filter change', 'Timing Belt Replacement')
    print("======="")
    c1.printCarDetail()
    print("======"")
    c2.printCarDetail()
    print("======"")
    c3.printCarDetail()
    print("======="")
    print("No.of Car =", Car.count)
```

```
[]: #Question- 3
    class Department:
        def __init__(self, s):
            self.semester = s
            self.name = "Default"
            self.id = -1
        def student_info(self):
            print("Name:", self.name)
            print("ID:", self.id)
        def courses(self, c1, c2, c3):
            print("No courses Approved yet!")
    class CSE(Department):
        def __init__(self,name,roll,sem):
            self.name=name
            self.id=roll
            self.semester=sem
        def courses(self, c1, c2, c3):
            print("Courses approved to this CSE student in {sem} semester:".
     →format(sem=self.semester))
            print(c1)
            print(c2)
            print(c3)
    class EEE(Department):
        def __init__(self, name, roll, sem):
            self.name = name
            self.id = roll
            self.semester = sem
        def courses(self, c1, c2, c3):
            print("Courses approved to this EEE student in {sem} semester:".

→format(sem=self.semester))
            print(c1)
            print(c2)
            print(c3)
    s1 = CSE("Rahim", 16101328, "Spring2016")
    s1.student_info()
    print("----")
```

```
s1.courses("CSE110", "MAT110", "ENG101")
print("==========")
s2 = EEE("Tanzim", 18101327, "Spring2018")
s2.student_info()
print("------")
s2.courses("Mat110", "PHY111", "ENG101")
print("==========")
s3 = CSE("Rudana", 18101326, "Fall2017")
s3.student_info()
print("-----")
s3.courses("CSE111", "PHY101", "MAT120")
```

```
[ ]: #Question- 1
     list1 = input()
     range1 = input()
     list2 = list1.split(",")
     dict1 = \{\}
     summation = int(list2[0])
     dict1[0] = summation
     i = 1
     while i < len(list2):</pre>
         summation += int(list2[i])
         dict1[i] = summation
         i += 1
     print(dict1)
     r1=int(range1[0])
     r2=int(range1[2])
     print(dict1[r2] - dict1[r1-1])
```