

In [69]:

```

1  # Q1
2  class Employee:
3      def __init__(self, emp_id, lang):
4          self.emp_id = emp_id
5          self.lang = lang
6
7      def getID(self):
8          return self.id
9
10 class Programmer(Employee):
11     def __init__(self, name, emp_id, age, lang):
12         self.name = name
13         self.age = age
14         Employee.__init__(self, emp_id, lang)
15
16     def getEmpDetails(self):
17         return (f'Name: {self.name}\nID: {self.emp_id}\nProgramming Language: {self.lang}')

```

executed in 16ms, finished 21:34:35 2020-06-18

In [70]:

```

1  pg = Programmer(name='Ali', emp_id=80, age=20, lang='Java')
2  print(pg.getEmpDetails())

```

executed in 8ms, finished 21:34:35 2020-06-18

Name: Ali

ID: 80

Programming Language: Java

In [71]:

```

1  # Q2
2  class Employee:
3      def __init__(self, emp_id, lang):
4          self.emp_id = emp_id
5          self.lang = lang
6
7      def getID(self):
8          return self.id
9
10 class Programmer(Employee):
11     def __init__(self, name, emp_id, age, lang):
12         self.name = name
13         self.age = age
14         Employee.__init__(self, emp_id, lang)
15
16     def getEmpDetails(self):
17         return (f'Name: {self.name}\nID: {self.emp_id}\nProgramming Language: {self.lang}')
18
19 class Designer(Programmer, Employee):
20     def __init__(self, name, emp_id, age, lang):
21         Programmer.__init__(self, name, emp_id, age, lang)
22         Employee.__init__(self, emp_id, lang)
23     def getDesignType(self):
24         return 'Abstract'

```

executed in 24ms, finished 21:38:50 2020-06-18

In [34]:



```
1 ds1 = Designer(name='Aman', emp_id=90, age=18, lang='CSS')
2 print(ds1.getEmpDetails())
3 print(ds1.getDesignType())
```

executed in 6ms, finished 20:18:47 2020-06-18

Name: Aman

ID: 90

Programming Language: CSS

Abstract

In [53]:



```
1 # Q3
2 class Bank:
3     def __init__(self, bank_name, bank_location):
4         self.b_name = bank_name
5         self.b_location = bank_location
6
7     def getBankDetails(self):
8         print(f'Bank Name: {self.b_name}\nLocation: {self.b_location}')
9
10    def provideLoan(self, amount):
11        return amount
12
13    class Car_Dealer:
14        def __init__(self, name, showroom_loc, company):
15            self.name = name
16            self.showroom_loc = showroom_loc
17            self.company = company
18        def showCar(self, car):
19            print(f'Showing {car} Car.')
20        def sellCar(self, name):
21            print(f'Car Sold : {name}')
22        def getPayment(self, amount):
23            print(f'Amount Collected {amount}')
24
25    class Customer(Car_Dealer, Bank):
26        def __init__(self, name, bank_name, bank_location, acc_id):
27            self.name = name
28            self.acc_id = acc_id
29            self.balance = 20000
30            Bank.__init__(self, bank_name, bank_location)
31
32        def getCustomerInfo(self):
33            print(f'Name: {self.name}\nAccount ID: {self.acc_id}')
34        def getLoan(self, amount, duration):
35            print(f'Requesting Loan From {self.b_name}, {self.b_location}')
36            print(f'Request Accepted\nAmount Provided: {super().provideLoan(amount)} for {duration}')
37        def buyCar(self):
38            print('Buying Car')
39        def payAmount(self, amount):
40            super().getPayment(amount)
41            print('Payment Done')
```

executed in 21ms, finished 21:10:52 2020-06-18

In [54]:



```
1 c1 = Customer(name='Ali', bank_name='HBL', bank_location='Gulshan', acc_id=80)
2 c1.buyCar()
3 c1.getLoan(100000, '09')
4 c1.payAmount(20000)
```

executed in 16ms, finished 21:10:52 2020-06-18

Buying Car

Requesting Loan From HBL, Gulshan

Request Accepted

Amount Provided: 100000 for 09 months.

Amount Collected 20000

Payment Done

In [67]:



```
1 #Q4
2 class Customer:
3     def __init__(self, name, age, phone):
4         self.name = name
5         self.age = age
6         self.phone = phone
7
8     def getCustomerInfo(self):
9         return (f'Customer Name: {self.name}\nCustomer Age: {self.age}\nCutomer Phone: {self.phone}')
10
11
12
13 class Management:
14     def __init__(self, ManagerName, ManagerAge, ManagerPhone):
15         self.ManagerName = ManagerName
16         self.ManagerAge = ManagerAge
17         self.ManagerPhone = ManagerPhone
18
19     def getManagementInfo(self):
20         return (f'Manager Name: {self.ManagerName}\nManager Age: {self.ManagerAge}\nManager Phone: {self.ManagerPhone}')
21
22
23 class Cargo(Customer, Management):
24     def __init__(self, name, age, phone, ManagerName, ManagerEmail, ManagerPhone):
25         Customer.__init__(self, name, age, phone)
26         Management.__init__(self, ManagerName, ManagerEmail, ManagerPhone)
27
28     def getCargoDetails(self):
29         print(f'\t-Cutomer Details-\n{super().getCustomerInfo()}\n\t-ManagementDetails-\n{self.getManagementInfo()}')
30
```

executed in 16ms, finished 21:30:15 2020-06-18

In [68]:



```
1 order = Cargo('Afsha', 19, '021456', 'Hamza', 24, '02144')
2 order.getCargoDetails()
```

executed in 16ms, finished 21:30:22 2020-06-18

-Cutomer Details-

Customer Name: Afsha

Customer Age: 19

Cutomer Phone: 021456

-ManagementDetails-

Manager Name: Hamza

Manager Age: 24

Phone: 02144