

```
lab10 q1.py x lab10 q3.py x
1 from abc import ABCMeta, abstractmethod
2 class Animal(metaclass = ABCMeta):
3     def __init__(self, name):
4         self.name = name
5     @abstractmethod
6     def talk(self):
7         pass
8 class Cat(Animal):
9     def talk(self):
10        print(f'The cat {self.name} talks as "Meao meo".')
11 class Dog(Animal):
12     def talk(self):
13        print(f'The dog {self.name} barks as "waof waof".')
14 cat1 = Cat("Mano")
15 cat1.talk()
16 dog1 = Dog("Tonny")
17 dog1.talk()

lab10 q1 x
"C:\Program Files\Python310\python.exe" "C:/Users/HAFIZ COMPUTER/Desktop/HASNAIN/OOP/lab10/lab10 q1.py"
The cat Mano talks as "Meao meo".
The dog Tonny barks as "waof waof".
Process finished with exit code 0
```

```
lab10 q1.py x lab10 q3.py x
1 from abc import ABCMeta, abstractmethod
2 class Person(metaclass = ABCMeta):
3     def __init__(self, price):
4         self.price = price
5     @abstractmethod
6     def ticket_price(self):
7         pass
8 class Employed_Person(Person):
9     def ticket_price(self):
10        print("The original price for Employed person is: ", self.price)
11        concession = (0.8 * self.price)
12        print("The ticket price after concession is : ", concession)
13 class Student(Person):
14     def ticket_price(self):
15        print("The original price for Student is: ", self.price)
16        concession = (0.5 * self.price)
17        print("The ticket price after concession is : ", concession)
18 A = Employed_Person(1000)
19 A.ticket_price()
20 print()
21 B = Student(800)
22 B.ticket_price()

Employed_Person > ticket_price()

lab10 q3 x
"C:\Program Files\Python310\python.exe" "C:/Users/HAFIZ COMPUTER/Desktop/HASNAIN/OOP/lab10/lab10 q3.py"
The original price for Employed person is: 1000
The ticket price after concession is : 800.0

The original price for Student is: 800
The ticket price after concession is : 400.0
```