**Artificial Intelligence Lab**

**(CS325)**

**Lab 1**

**Bachelor of Technology (CSE)**

By

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Department of Computer Science and Engineering

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Aim: Land Trading Application

Code:

print("Land Trading Application")

#MVC

# overloading in python

class LandTrading:

    def \_\_init\_\_(self, landOwnerId = 0, landOwnerName="", acresOfLand = 0, amount=0):

        self.landOwnerId = landOwnerId

        self.landOwnerName = landOwnerName

        self.acresOfLand = acresOfLand

        self.amount = amount

    def get\_landOwnerId(self):

        return self.landOwnerId

    def set\_landOwnerId(self,Id):

         self.landOwnerId = Id

    def get\_landOwnerName(self):

        return self.landOwnerName

    def set\_landOwnerName(self, name):

        self.landOwnerName = name

    def get\_acresOfLand(self):

        return self.acresOfLand

    def set\_acresOfLand(self,acres):

        self.acresOfLand = acres

    def get\_amount(self):

        return self.amount

    def set\_amount(self,Amt):

        self.amount = Amt

    def sellingTo(self,landQty,pricePerAcre,LandBuyer):

        self.amount = self.amount + (landQty\*pricePerAcre)

        LandBuyer.amount = LandBuyer.amount - (landQty\*pricePerAcre)

        self.acresOfLand = self.acresOfLand - landQty

        LandBuyer.acresOfLand = LandBuyer.acresOfLand  +landQty

# driver code

print("Owner 1")

owner\_id = int(input("Owner Id For 1 Owner:"))

owner\_name = input("Owner name:")

owner\_acresOfland = int(input("How much Acres of Land u have:"))

owner\_amt = int(input("Amount in Bank:"))

Owner1 = LandTrading(owner\_id,owner\_name,owner\_acresOfland,owner\_amt)

Owner2 = LandTrading()

print("Owner 2")

Owner2.set\_landOwnerId(int(input("Owner Id For 2 Owner:")))

Owner2.set\_landOwnerName(input("Owner name:"))

Owner2.set\_acresOfLand(int(input("How much Acres of Land u have:")))

Owner2.set\_amount(int(input("Amount in Bank:")))

print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

LandSell=int(input(("How wants to sell the Land: ")))

Qty=int(input(("what amount of land u want to sell: ")))

pricePerAcre= int(input(("Price per acre of the Land: ")))

print("")

print("Before Transaction")

print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

print("Owner1")

print("Land Avialble:", Owner1.acresOfLand)

print("Amount Avialble", Owner1.amount)

print("")

print("Owner2")

print("Land Avialble:",Owner2.get\_acresOfLand())

print("Amount Avialble",Owner2.get\_amount())

if(LandSell == 1):

    Owner1.sellingTo(Qty,pricePerAcre,Owner2)

else:

    Owner2.sellingTo(Qty,pricePerAcre,Owner1)

print("After the Transaction")

print("")

print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

print("Owner1")

print("Land Avialble:", Owner1.acresOfLand)

print("Amount Avialble", Owner1.amount)

print("")

print("Owner2")

print("Land Avialble:",Owner2.get\_acresOfLand())

print("Amount Avialble",Owner2.get\_amount())

Output:

