

In [\*]:

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class coffee_machine:
    water=500
    milk=500
    coffee=650
    total=2.5
    def __init__(self,resource_value ):
        self.resource_value=resource_value
    def prepare(self,resource_value ,x):
        if(x=="1"):
            self.water=self.water-100
            print(self.water)
            self.milk=self.milk-100
            print(self.milk)
            self.coffee=self.coffee-7
            print(self.coffee)
            self.total=self.total+4.5
            print(self.total)
            print("*****HERE IS YOUR ESPRESSO.ENJOY!*****")
        if(x=="2"):
            self.water=self.water-70
            print(self.water)
            self.milk=self.milk-100
            print(self.milk)
            self.coffee=self.coffee-7
            print(self.coffee)
            self.total=self.total+2.5
            print(self.total)
            print("*****HERE IS YOUR LATTE.ENJOY!*****")

        elif(x=="3"):
            self.water=self.water-50
            print(self.water)
            self.milk=self.milk-70
            print(self.milk)
            self.coffee=self.coffee-10
            print(self.coffee)
            self.total=self.total+7.99
            print(self.total)
            print("*****HERE IS YOUR CAPPUCINO.ENJOY!*****")
            self.report(resource_value,x)
    def report(self,resource_value,x):
        print(f"the status of coffee machine:")
        print(f"{self.water} of water")
        print(f"{self.milk} of milk")
        print(f"{self.coffee} of coffee beans")
        print(f"${self.total} of money")
        self.check(resource_value,x)

    def check(self,resource_value,x ):
        if(resource_value=="espresso"):
            if(self.water<100):
                print("sorry there is not enough of water")
            elif(self.milk<100):
                print("sorry there is not enough of milk")
            elif(self.coffee<70):
                print("sorry there is not enough of coffee")
            else:
                self.coins(resource_value,x)
        elif(resource_value=="latte"):
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        if(self.water<70):
            print("sorry there is not enough of water")
        elif(self.milk<100):
            print("sorry there is not enough of milk")
        elif(self.coffee<70):
            print("sorry there is not enough of coffee")
        else:
            self.coins(resource_value,x)
    else:
        if(self.water<50):
            print("sorry there is not enough of water")
        elif(self.milk<70):
            print("sorry there is not enough of milk")
        elif(self.coffee<100):
            print("sorry there is not enough of coffee")
        else:
            self.coins(resource_value,x)
def coins(self,resource_value,x):
    print("*****TO CALCULATE THE TOTAL AMOUNT PLEASE INSERT YOUR COIN!*****:")
    quarter=int(input("enter the money in terms of quarter:"))
    dimes=int(input("enter the money in terms of dimes:"))
    pennies=int(input("enter the money in terms of pennies:"))
    nickel=int(input("enter the money in terms of nickel:"))
    total=(0.25*quarter)+(0.1*dimes)+(0.05*nickel)+(0.01*pennies)
    self.tran(total,x,resource_value)

def tran(self,total,x,resource_value):
    if(x=="1"):
        if(total<4.5):
            print("sorry,there is not enough of money.money refunded")
        else:
            print("Here is your change:)",round(total-4.5,2))
            self.prepare(resource_value,x)
    elif(x=="2"):
        if(total<2.5):
            print("sorry, there is not enough of money.money refunded")
        else:
            print("Here is your change :)",round(total-2.5,2))
            self.prepare(resource_value,x)
    else:
        if(total<7.99):
            print("sorry,there is not enough of money.money refunded")
        else:
            print("Here is your change :)",round(total-7.99,2))
            self.prepare(resource_value,x)

x="on"
s=coffee_machine(x)
while(True):
    y=input("what do you want to buy?1-espresso,2-latte,3-cappuccino,back-to main menu:\n")
    if(y=="off"):
        break
    if(y=="report"):
        s.prepare(x)
        continue
    s.report(x,y)

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what do you want to buy?1-espresso,2-latte,3-cappuccino,back-to main menu:

1

the status of coffee machine:

500 of water

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500 of milk
650 of coffee beans
$2.5 of money
*****TO CALCULATE THE TOTAL AMOUNT PLEASE INSERT YOUR COIN!*****:
enter the money in terms of quarter:100
enter the money in terms of dimes:200
enter the money in terms of pennies:300
enter the money in terms of nickel:400
Here is your change:) 63.5
400
400
643
7.0
*****HERE IS YOUR ESPRESSO.ENJOY!*****
what do you want to buy?1-espresso,2-latte,3-cappuccino,back-to main menu:
2
the status of coffee machine:
400 of water
400 of milk
643 of coffee beans
$7.0 of money
*****TO CALCULATE THE TOTAL AMOUNT PLEASE INSERT YOUR COIN!*****:
enter the money in terms of quarter:100
enter the money in terms of dimes:200
enter the money in terms of pennies:300
enter the money in terms of nickel:400
Here is your change :) 65.5
330
300
636
9.5
*****HERE IS YOUR LATTE.ENJOY!*****
what do you want to buy?1-espresso,2-latte,3-cappuccino,back-to main menu:
3
the status of coffee machine:
330 of water
300 of milk
636 of coffee beans
$9.5 of money
*****TO CALCULATE THE TOTAL AMOUNT PLEASE INSERT YOUR COIN!*****:
enter the money in terms of quarter:100
enter the money in terms of dimes:200
enter the money in terms of pennies:90
enter the money in terms of nickel:78
Here is your change :) 41.81
280
230
626
17.490000000000002
*****HERE IS YOUR CAPPUCINO.ENJOY!*****
the status of coffee machine:
280 of water
230 of milk
626 of coffee beans
$17.490000000000002 of money
*****TO CALCULATE THE TOTAL AMOUNT PLEASE INSERT YOUR COIN!*****:
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enter the money in terms of quarter:
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