MENU = {  
 "espresso": {  
 "ingredients": {  
 "water": 50,  
 "coffee": 18,  
 },  
 "cost": 1.5,  
 },  
 "latte": {  
 "ingredients": {  
 "water": 200,  
 "milk": 150,  
 "coffee": 24,  
 },  
 "cost": 2.5,  
 },  
 "cappuccino": {  
 "ingredients": {  
 "water": 250,  
 "milk": 100,  
 "coffee": 24,  
 },  
 "cost": 3.0,  
 }  
}  
  
profit = 0  
resources = {  
 "water": 300,  
 "milk": 200,  
 "coffee": 100,  
}  
  
def is\_resource\_sufficient(order\_ingredients):  
 *"""Return True when order can be made, False if ingredient are insufficient"""* for item in order\_ingredients:  
 if order\_ingredients[item] >= resources[item]:  
 print(f"Sorry there is not enough {item}.")  
 return False  
 else:  
 return True  
  
def process\_coins():  
 print("Please insert your coins.")  
 total = int(input("How many quarters?")) \* 0.25  
 total = int(input("How many dimess?")) \* 0.1  
 total = int(input("How many nickles?")) \* 0.05  
 total = int(input("How many pennies?")) \* 0.01  
 return total  
  
def is\_transaction\_successful(money\_recieved, drink\_cost):  
 *"""Returns True when payement is accepted, of false when money is insufficient"""* if money\_recieved >= drink\_cost:  
 change = round(money\_recieved - drink\_cost, 2)  
 print(f"Here is ${change} in change. ")  
 global profit  
 profit += drink\_cost  
 return True  
 else:  
 print("Sorry, that's not enough money, Money refunded")  
 return False  
  
def make\_coffee(drink\_name, order\_ingredients):  
 *"""Deduct the required ingredients from the resources"""* for item in order\_ingredients:  
 resources[item] -= order\_ingredients[item]  
 print(f"Here is your {drink\_name}")  
  
  
is\_on = True  
while is\_on:  
 choice = input("What would you like to have? (espresso/latte/cappuccino):")  
 if choice == "off":  
 is\_on = False  
 elif choice == "report":  
 print(f"Water : {resources['water']}ml")  
 print(f"Milk : {resources['milk']}ml")  
 print(f"Coffee : {resources['coffee']}g")  
 print(f"Money : ${profit}")  
 else:  
 drink = MENU[choice]  
 is\_resource\_sufficient(drink["ingredients"])  
 payment = process\_coins()  
 if is\_transaction\_successful(payment, drink["cost"]):  
 make\_coffee(choices, drink["ingredients"])