VENDING MACHINE

using python

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Summary of Topics

o Problem statement

o Solution

o Source code

o output

o System architecture

o Improvement

o Advantage

Problem Statement

we know people have to stand in long lines and have to wait until their chance to come in school canteen or in office canteen just to get a good meal or have to wait in long lines in movie theater during intervals or somewhere else.

Solution

The solution to these problems are vending machine, Vending machines are convenient and they allow your employees and even clients and customers to get what they need in a time and cost-saving manner.

Source Code

```python
print ("*****************DRINKS MACHINE*****************")

print ("*********************WELCOME********************")

print("for water choose = 1\nfor coco cola choose = 2\nfor pepsi choose = 3\nfor coffee choose = 4\nfor mazza choose = 5")

WATER = 10

COCA_COLA = 30

PEPSI = 20

COFFEE=35

MAZZA=25

money = int(input("Please Enter Your Money "))

drink_choice = int(input("Please enter your drink choice "))

quantity=int(input("please enter quantity "))
```

```python
if drink_choice == 1:
    if money >= (quantity*WATER):
        print ("you selected WATER")
        money = money - (quantity*WATER)
        print ("Your change is", money)
        print("thanks for visiting")
    else:
        money = (quantity*WATER) - money
        print ("You need",money ,"rupees more")
elif drink_choice == 2:
    if money >=(quantity* COCA_COLA):
        print ("you selected COCA_COLA")
        money = money - (quantity*COCA_COLA)
        print ("Your change is", money)
        print("thanks for visiting")
    else:
        money =(quantity*COCA_COLA) - money
        print ("You need",money ,"rupees more")
```
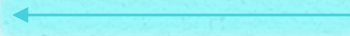
```python
    elif drink_choice == 3:

        if money >= (quantity*PEPSI):

            print ("you selected PEPSI")

            money = money - (quantity*PEPSI)

            print ("Your change is", money)

            print("thanks for visiting")

        else:

            money =  (quantity*PEPSI) - money

            print ("You need",money ,"rupees more")


    elif drink_choice == 4:

        if money >= (quantity*COFFEE):

            print ("you selected COFFEE")

            money = money - (quantity*COFFEE)

            print ("Your change is", money)

            print("thanks for visiting")

        else:

            money =  (quantity*COFFEE) - money

            print ("You need",money ,"rupees more")
```

```python
elif drink_choice == 5:

    if money >= (quantity*MAZZA):

        print ("you selected MAZZA")

        money = money - (quantity*MAZZA)

        print ("Your change is", money)

        print("thanks for visiting")

    else:

        money =  (quantity*MAZZA) - money

        print ("You need",money ,"rupees more")


else:

    print ("you did not make a valid selection")
```

Output

Normal condition

```
*******************DRINKS MACHINE*********************
*********************WELCOME**************************
Please Enter Your Money 100
Please enter your drink choice 2
please enter quantity 3
you selected COCA_COLA
Your change is 10
thanks for visiting


...Program finished with exit code 0
Press ENTER to exit console.
```
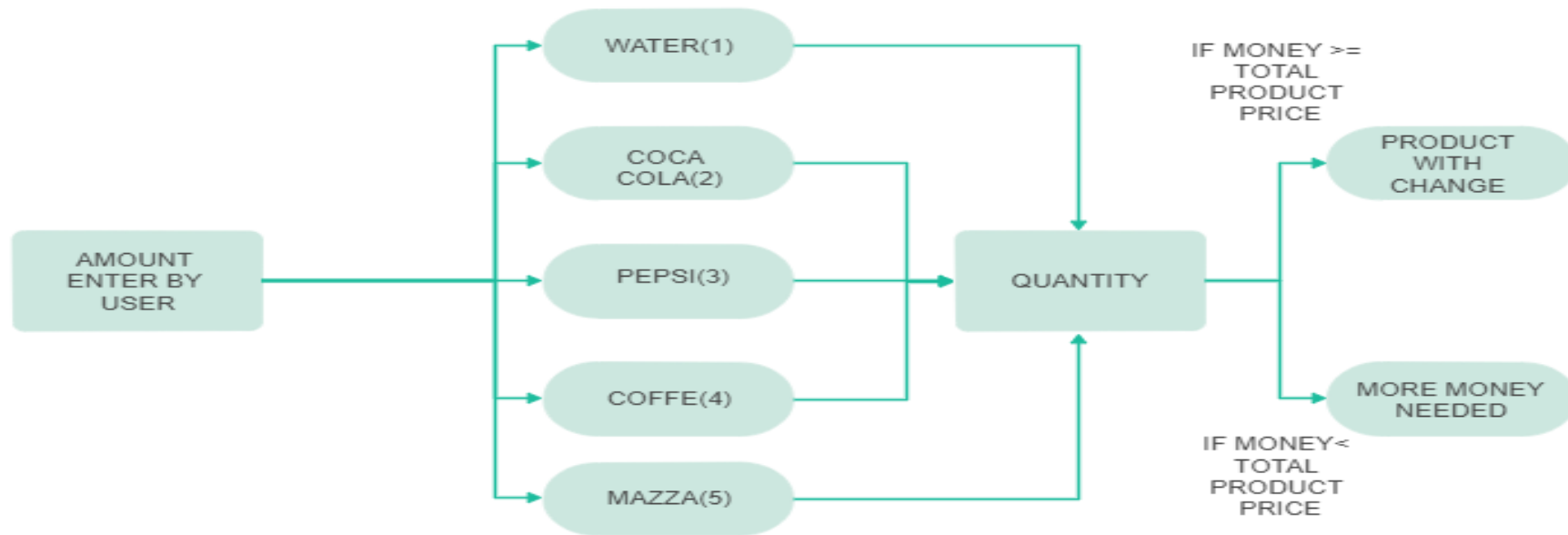
During money shortage

```
*******************DRINKS MACHINE*********************
*********************WELCOME**************************
Please Enter Your Money 50
Please enter your drink choice 3
please enter quantity 4
You need 30 rupees more


...Program finished with exit code 0
Press ENTER to exit console.
```

System Architecture

IMPROVEMENT

o In this project we cannot order multiple products of different types at once.

o I need to add multiple payment options.

o Once money is entered and money is not enough then machine right now do not return the money , you have to enter more money.(which is a big drawback right now , I will improve this problem in future)

Advantage

o Vending Machines are Low Maintenance

o Saves Time and Other Costs

o Keeps staff and students onsite

o Vending machines will help to make more money

THANK YOU