**Practical No. 15**

**A.1 Aim:**

To solve the make or buy decision problem

**A.2 Prerequisite:**

Python, Jupiter notebook, demo in xlsx

**A.3 Outcome:**

The program is written in Python solving make or buy decision.

**A.4 Theory:**

To be discussed during the lecture hours.

PART B

(PART B : TO BE COMPLETED BY STUDENTS)

***(Students must submit the soft copy as per the following segments within four hours of the practical. The soft copy must be uploaded on the portal or emailed to the concerned lab in charge faculties at the end of the practical in case there is no portal access available)***

|  |  |
| --- | --- |
| Roll. No.01 | Name: abhishek michael |
| Class | Batch: |
| Date of Experiment:27/2/24 | Date of Submission:27/2/24 |
| Grade: | |

**B.1 Task to do:**

Implement the functionality shown in the video to solve the fixed charge problem

<https://www.youtube.com/watch?v=tuyEQgm7a0U>

**B.2 Output program**

# Cost data

material\_cost = 3.00

direct\_labor\_cost = 3.00

other\_variable\_expenses = 1.00

fixed\_expenses\_per\_unit = 3.00

# Total manufacturing cost per unit

manufacturing\_cost\_per\_unit = material\_cost + direct\_labor\_cost + other\_variable\_expenses + fixed\_expenses\_per\_unit

# Market price

initial\_market\_price = 28.50

reduced\_market\_price = 26.50

# Decision making

if initial\_market\_price > manufacturing\_cost\_per\_unit:

    print("It is advised to make the product as its manufacturing cost is less than the market price.")

else:

    print("It is advised to buy the product as the market price is less than the manufacturing cost.")

# Decision making if supplier reduces the price

if reduced\_market\_price > manufacturing\_cost\_per\_unit:

    print("If the supplier decreases the cost from 28.50 to 26.50, it is recommended to make the product as manufacturing expenses are less than the market price.")

else:

    print("If the supplier decreases the cost from 28.50 to 26.50, it is recommended to buy the product as manufacturing expenses are more than the market price.")

It is advised to make the product as its manufacturing cost is less than the market price.

If the supplier decreases the cost from 28.50 to 26.50, it is recommended to make the product as manufacturing expenses are less than the market price.

**B.4 Conclusion:**

It is advised to make the product as its manufacturing cost is less than the market price.

If the supplier decreases the cost from 28.50 to 26.50, it is recommended to make the product as manufacturing expenses are less than the market price.