Creating Value for business in terms of financial returns of business

|  |  |  |  |
| --- | --- | --- | --- |
| **Input** | **Processing** | **Output** | |
| Investment  interest Rate  nrOfYears | Promp investment  Get investment  Prompt InterestRate  Get interestRate  Prompt nrOfYears  Get nrOfYears  Calculate returnsOnInvestments | returnsOnInvestment | |
| itemSellingPrice  quantity | Prompt itemSellingPriceGet itemSellinPrice  Prompt quantity  netGet quantity  Calculate revenue | revenue | |
| costOfSales | Prompt costOfSales  Get costOfSales  Calculate grossprofit | grossprofit | |
| expenses | Prompt expenses  Get expenses  Calculate netprofit  Calculate loss | netprofit | |
|  | Print Finances | |  |

**Modules**:

• calculate\_returnsOnInvestment + and total investment at the end of nrOfYears

• calculate\_revenue

• Calculate\_percentage\_increase

• Calculate\_items\_profit

• Print\_finances

**Functions**(amendable):

* calculateProduct()
* calculateSum()
* calculateDifference()
* itemCounter()
* totalItemPriceCounter()

Let’s say our(small business)sells 10 main product types.(amendable)

|  |  |  |
| --- | --- | --- |
| **PRODUCT** | **Capacity/mass/quantity** | **PRICE(N$)** |
| Facial cleanser | 100ml  200ml  300ml  500ml | 30  32  34  36 |
| Shower Gel | 100ml  200ml  300ml  500ml | 25  27  35  40 |
| Facemask | 1  5 in a packet | 20  105 |
| Skin cream | 250g  500g | 15  32 |
| Shampoo | 100ml  200ml  300ml  500ml | 45  48  52  55 |
| Hair food | 250g  500g | 33  42 |
| Makeup set | 1 | 135 |
| Hair Spray | 100ml  200ml  300ml  500ml | 32  35  38  42 |
| Hair conditioner | 100ml  200ml  300ml  500ml | 46  49  53  56 |
| Styling lotion | 250g  500g | 22  34 |

Potential expenses(amendable)

|  |  |
| --- | --- |
| **Operating Expenses**:  Payroll(employee salaries)  Utilities (space where products were created)  Rent  Depreciation (of equipment used to create product) | 50000  12000  16000  10000 |
| **Interest on loan** | 7000 |
| **Tax** | 5000 |

**Hierarchy diagram link**:

<https://app.diagrams.net/#LHierarchy%20Chart>

**OVERALL HIERARCHY DIAGRAM DRAFT LINK(pdf on github):**

<https://app.diagrams.net/?libs=general;flowchart#LHierarchy%20chart%20draft%20>

**Flowchart diagram link(pdf on github) :**

<https://app.diagrams.net/?libs=general;flowchart#LFlowchart>

**ADDITIONAL INFO(for later use maybe)**

Control structures required for each module maybe:

DOWHILE, REPEAT..UNTIL.., IF STATEMENT( if net profit above 0 , display net profit , else display loss) or calculate loss.

Sorry, This is just to help see clearly where and how to approach the whole pseudocode thing

**Noku pseudocode:**

Start

Cost\_price = [itemx,itemy,itemz]

Prompt for Increase%

Get Increase%

Prompt for quantity

Get quantity

Item\_ID = 0

Prompt for expenses

Get expenses

DOWHILE item\_ID < quantity

Price% = cost\_price[item\_ID] \* Increase%

Selling\_price

**Calculations**

**returnsOnInvestments** = investment x interestRate x nrOfYears

or

=investment(1 + interestRate)

**revenu**e= itemSellingPrice x quantityOfItemSold

**grossprofit**= revenue - costOfSales

**netprofit**= grossprofit -expenses

**loss=** netprofit + (netprofit x 2) [we’ll look at it later]