

## Pseudo Code

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**Module main()**

input,rotate[2],rotate[0]='y'

**While** if rotate[0]='y'

Do you want to know?

- 1) Price elasticity of demand and Total Revenue (Enter 1)
- 2) Price elasticity of supply (Enter 2)
- 3) Income elasticity of demand (Enter 3)
- 4) Cross elasticity of demand (Enter 4)
- 5) Available budget to maximize (Enter 5)

Then Enter your choice : input

**if** (input == 1)

call price\_demand()

**else if** (input == 2)

call price\_supply()

**else if** (input == 3)

call income\_demand()

**else if** (input == 4)

call cross\_demand()

**else if** (input == 5)

call maximize\_budget()

you want to end this program?(yes/no)

**End While**

**End main modul**

## Module Price\_demand()

### BEGIN

Enter your price and changed price : f\_price c\_price

Enter your quantity demand and changed quantity demand : f\_demand c\_demand

### Process

$$PED = ((c\_demand - f\_demand) / (c\_price - f\_price)) * (f\_price / f\_demand)$$

### Output

Price Elasticity Of Demand value

If(PED>1)

    This is an Elastic.

    If (c\_price>f\_price)

        Total revenue is Decrease.

    else

        Total revenue is Increase.

End If

If(PED<1 && PED >0)

    This is an Inelastic

    if(c\_price>f\_price)

        Total revenue is Increase.

    else

        Total revenue is Decrease.

End If

You want to know idea about revenue values? (yes/no) : idea

**If idea = “yes”**

**Process**

$R1 = f\_price * f\_demand$

$R2 = c\_price * c\_demand$

$Total\_revenue = R2 - R1$

**Output**

First revenue =  $R1$

Second revenue =  $R2$

Increase revenue =  $R2 - R1$

**If idea = “no”**

No process, end this function.

**END**

**End module Price\_demand**

## **Module Price\_supply()**

### **BEGIN**

Enter your price and changed price : f\_price c\_price

Enter your quantity supply and changed quantity supply : f\_supply c\_supply

### **Process**

$$PES = ((c\_supply - f\_supply) / (c\_price - f\_price)) * (f\_price / f\_supply)$$

### **Output**

Price Elasticity Of Supply Value.

**If**(PES>1)

    This is an Elastic.

    Supply change value is large.

**End If**

**If**(PES<1)

    This is an Inelastic.

    Supply change value is small.

**End If**

**End**

**End module Price\_supply()**

## **Module income\_demand()**

### **BEGIN**

Enter your income and changed income : f\_income c\_income

Enter your quantity demand and changed quantity demand : f\_demand c\_demand

### **Process**

$Q = (c\_demand - f\_demand) / f\_demand;$

$I = (c\_income - f\_income) / f\_income;$

$YED = Q / I$

### **Output**

Income elasticity of demand Value

**IF**(YED>0) **THEN**

    This good is Normal good.

**Else**

    This good is Inferior good.

**ENDIF**

**END**

**End module income\_demand**

## **Module cross\_demand()**

### **BEGIN**

Enter your food X quantity demand and changed demand : x1\_demand x2\_demand

Enter your food Y price and changed price : y1\_price y2\_price

### **Process**

$$Q=(x2\_demand-x1\_demand)/x1\_demand$$

$$P=(y2\_price-y1\_price)/y1\_price$$

$$XED=Q/P$$

### **Output**

Cross elasticity of demand Value

**IF**(XED>0) **THEN**

X and Y good are substitute goods.

**ELSE IF**(XED<0) **THEN**

X and Y good are complementary goods.

**ELSE**

No relationship between X and Y goods.

**ENDIF**

**END**

**End module cross\_demand**

**Module maximize\_buget()**

**BEGIN**

Enter available budget : budget

Enter Price of good X and Y : price\_x price\_y

Enter Unit consumed : unit

You know total utility or marginal utility (t/m):

**If you enter 'm'**

Enter marginal utility

**- -For loop--**

For i 0 to 4

x[i] , y[i] get

**End For loop**

**Process**

**--For loop—**

For i 0 to (unit-1) do

xu=x[i]/price\_x

For j 0 to (unit-1) do

yu=y[j]/price\_y

**IF(xu==yu) THEN**

**IF(((i+1.0)\*price\_x) + ((j+1.0)\*price\_y) == budget) THEN**

Consumption bundle is X value Y value

goto jump1

**ENDIF**

**End For loop**

jump1

**Output**

Consumption bundle is X= number of X good Y= number of X good

**If you enter 't'**

Enter Total utility

**- -For loop--**

For i 0 to 4

x[i] , y[i] get

**End For loop**

**Process**

**--For loop—**

For k 0 to (unit-1) do

$xx[k] = x[k] - x[k - 1]$

$yy[k] = y[k] - y[k - 1]$

**End For loop**

**--For loop--**

For i 0 to (unit-1) do

$xu = xx[i] / price\_x$

For j 0 to (unit-1) do

$yu = yy[j] / price\_y$



**IF**( $x_u == y_u$ ) **THEN**

**IF**(( $(i+1.0)*price\_x + (j+1.0)*price\_y == budget$ ) **THEN**

Consumption bundle is  $X = \text{number of X good}$   $Y = \text{number of X good}$

goto jump2

**ENDIF**

**End For loop**

Jump2

**Output**

Consumption bundle is  $X = \text{number of X good}$   $Y = \text{number of X good}$

**END**

**END module maximize\_buget**

