

### Training assignments:

1. Implement an encryption/decryption algorithm. Develop 2 methods, 1<sup>st</sup> takes an input string and encrypts it, 2<sup>nd</sup> method should take the encrypted value and return the original decrypted value.

Algorithm is of your choice.

- a. **Sample algorithm for ref**

- i. **Input:** "apple"

- i. **Step1:** Reverse the input --> "elppa"

- ii. **Step2:** Replace all vowels using the following chart:

1. a => 0

2. e => 1

3. i => 2

4. o => 3

5. u => 4

// "elppa" --> 1lpp0

- iii. **Step3:** Add "aca" to the ending --> 1lpp0aca

**\* Example: Encrypt("banana") → "0n0n0baca"**

2. Develop a console application with the following features.
  - a. Display a menu with 5-6 items with their price listed
  - b. Ask the customer if they wish to buy anything ("Yes" or "No")
  - c. If the response is "No", print "Thank you!"
  - d. If the response is "Yes", ask What they would like to buy (Item name from menu)
  - e. After receiving response, ask quantity
  - f. After receiving quantity, display the price till point and ask if they would like to like to buy anything else ("Yes" or "No")
  - g. If yes, repeat the steps (D to F)
  - h. If no, display the total price

### Program should have:

- a. Separate methods for each task (Ex: Price calculation, Capture quantity and such)
- b. Recursion
- c. Global variable(s)
- d. Error handling for wrong inputs from user

### Sample Output

```
C:\Users\SAILS-DM93\source\repos\TestConsoleApp\TestConsoleApp\bin\Debug\TestConsoleApp.exe
Welcome to MiniMart:
Menu:

1) PASTE      Price: 80 rs
2) SHAMPOO    Price: 120 rs
3) CHIPS      Price: 30 rs
Would you like to buy any item?
yes
What would you like to buy?
paste
Please enter quantity
2
Your bill amount is: 160
Would you like to buy anything else?
yes
What would you like to buy?
shampoo
Please enter quantity
1
Your bill amount is: 280
Would you like to buy anything else?
yes
What would you like to buy?
chips
Please enter quantity
1
Your bill amount is: 310
Would you like to buy anything else?
no
Thanks, your total bill amount: 310
```