

# Q4:- Grocery Assistance / Calculator

Date: \_\_\_\_\_

## IPO

Input	Process	Output
① Amount of money Mr. Bhoola has.	① Check total cost of items Mr. Bhoola wants.	① Total cost of items.
② Prices of onions, apricots, grapes and tomatoes.	② Check if total cost > available money.	② Total cost and additional money.
③ Quantities of items Mr. Bhoola buys.	③ If yes, then ask Mr. Bhoola to add more money.	③ Total cost and change.
	④ If no, then total cost - available money to get Mr. Bhoola change.	

## PSEUDOCODE

- ① START
- ② // Input / output available
- ③ INPUT the money Mr. Bhoola
- ④ INPUT the prices of onions, apricots, grapes and tomatoes.
- ⑤ INPUT the quantities of items Mr. Bhoola buys.
- ⑥
- ⑦ // Process steps



Date: \_\_\_\_\_

8 calculate total cost of items Mr. Bhoola buys.

9 
$$\text{Total Cost} = \text{price Of Onion} * \text{quantity Of Onion} + \text{price Of Apricot} * \text{quantity Of Apricots} + \text{price Of Grapes} * \text{quantity Of Grapes} + \text{price Of Tomatoes} * \text{quantity Of Tomatoes}.$$

12 IF available money  $\leq$  total cost THEN

13 CALCULATE additional money = total cost - available money

14 PRINT "additional cost"

15 ELSE IF available money  $>$  total cost THEN

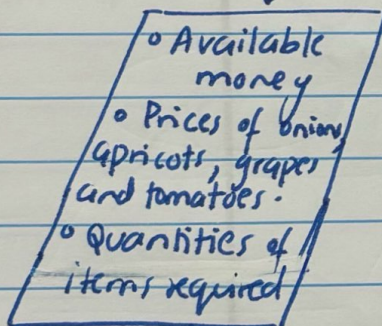
16 CALCULATE change = available money - total cost

17 PRINT "change"

18 END

### FLOWCHART

START



Calculate total cost =  
price of onion \* quantity of onion +  
price of apricot \* quantity of apricot +  
price of grape \* quantity of grape +  
price of tomato \* quantity of tomato

available money  $\leq$  total cost

available money  $>$  total cost

Calculate additional money =  
total cost - available money

"additional money"

Calculate change =  
available money - total cost

"Change"

END