

## DEPARTMENT OF ICT, CFS IIUM SEMESTER 2, SESSION 2021/2022

## ICT0525 – INTRO. TO PROGRAMMING ASSIGNMENT 2 (24 marks)

## **QUESTION:**

A company called Sporty Garments sells seven types of sporting attire, available in four sizes of S, M, L, XL with prices as below:

Туре	S	М	L	XL
Polo shirts	35.00	35.00	35.00	40.00
Football Jersey	73.50	73.50	74.50	75.00
Swimming suits	101.50	105.50	108.50	109.50
Tennis shirt	72.90	72.90	72.90	72.90
Windbreakers	84.00	85.70	87.70	89.70
Baseball Jersey	62.00	62.00	62.00	64.00
Fencing Jacket	94.00	95.00	97.00	99.00

- 1. Write a program that receives order of the sports attire, <u>repeatedly until there is **no** more order</u>.
- 2. The program should declare the following arrays:
  - a) sporting\_attire[][] array of seven types of sporting attire.
  - b) prices [][] 2 dimensional array of price of cookies for each type and for each size.
  - c) sizes [][] array of string for the sizes S, M, L, XL.
  - d) total\_sales[] (declared as global variable) to store daily sales for each type of attire.
- 3. The program must use the functions below:
  - a) main() calls ChooseAttire() to read choice of sporting attire flavour, call GetSize() to read the size of attire, and GetQuantity() to get the quantity to order, and pass these numbers to ProcessOrder().
  - b) ChooseAttire() declares the sporting\_attire[][] array and reads the customer's choice of sporting attire and returns to the calling module (reads repeatly if not a valid choice)
  - c) GetSize() declares the sizes[][] array and reads the size, i.e. 1 for S, 2 for M, 3 for L, and 4 for XL.
  - d) GetQuantity() reads the quantity to order.
  - e) ProcessOrder() declares the prices [][] array, receives the choice of sporting attire[][], size and quantity and displays the amount to pay.
  - f) Repeat the declaration of sporting\_attire[][] and sizes[][] here to show the confirmation of order)

- g) Calls the UpdateTotal() function to accumulate the sales of that type of sporting attire)
- h) UpdateTotal() will receive the type of sporting attire and amount of sales and accumulates the total sales for the attire type.
- 4. This program allow user to continue or end the process after displayed the amount to pay for current order.
- 5. The program clear output screen from any order and must display summary report after the last order is completed to show the total sales of each type of sporting attire and whether the sales achieves the daily target of RM500 for each types of sporting attire.

The output must fulfil the sample output below:

```
*** Welcome to Sporty Garments ***
You may choose from the following types of attire:
         Type
     ========
     1 - Polo Shirts
     2 - Football Jersey
     3 - Swimming Suit
     4 - Tennis Shirt
     5 - Windbreaker
     6 - Baseball Jersey
     7 - Fencing Jacket
Enter your attire choice: 8
Sorry wrong choice! Try again ...
You may choose from the following types of attire:
         Type
      - Polo Shirts
     2 - Football Jersey
     3 - Swimming Suit
     4 - Tennis Shirt
     5 - Windbreaker
     6 - Baseball Jersey
     7 - Fencing Jacket
Enter your attire choice: 3
You have chosen Swimming Suit
Available sizes: 1) Size S 2) Size M 3) Size L 4) Size XL
Choose which size: 2
Enter quantity: 2
```

Next output screen, after user choose to continue.

```
*** Welcome to Sporty Garments ***
You may choose from the following types of attire:
        Type
    =========
    1 - Polo Shirts
    2 - Football Jersey
    3 - Swimming Suit
    4 - Tennis Shirt
    5 - Windbreaker
    6 - Baseball Jersey
    7 - Fencing Jacket
Enter your attire choice: 4
You have chosen Tennis Shirt
                  1) Size S 2) Size M 3) Size L 4) Size XL
Available sizes:
Choose which size:
Enter quantity: 3
    Confirmation of order:
    _____
3 piece(s) of Tennis Shirt of size M.
Amount to pay is RM218.70
Another order? (Y or y to order again): N
```

Next output screen after user choose to end the process.

```
Summary of sales for today...
                       Total
       Type
                                  Reach Target
    1 - Polo Shirts
                      RM270
                                  NO
    2 - Football Jersey
                      RM480
                                  NO
    3 - Swimming Suit
                     RM675
                                  YES
    4 - Tennis Shirt
                      RM507
                                  YES
    5 - Windbreaker
                     RM430
                                 NO
    6 - Baseball Jersey RM209
                                  NO
    7 - Fencing Jacket
                     RM340
                                  NO
Have a nice day!!
Press any key to continue...
```

Draw the flowchart only for the main () function.

