ASSIGNMENT

STEPS TO EXECUTE :

- Open python idle or any other editor supports python.
- Drag the code and paste it over the code space.
- Run the editor .
- Enter the quantity values of product A, product B and product C.
- The editor will display the product name ,quantity and its price .
- The editor will ask whether gift wrap is needed for all the 3 products separately If you type yes wrap fee will be calculated.
- Subtotals will be displayed (sum all 3 products).
- Then it will display the discount name, which is applied ,discount amount which will be reduced from total and the reduced amount after discount.
- The shipping fee will be displayed based on the total number of units.
- Gift wrap fee will be displayed.
- Then the total bill amount after adding all the charges will be displayed.

EXECUTION PROCESS:

- Product, quantity and the price will be stored in a separate list named p_l,q_l and price_lt.
- Price_lt contains the initial subtotal of all the 3 products(without any discount)

- total will be calculated from price_lt list by iterating in a for loop.
- "Bulk_10_discount" condition is checked if satisfied a new total named "total2" is calculated and appended to the new list called final.
- Similarly, "flat_10_discount "is calculated if satisfied a new total "total1" is appended to the list final
- Similarly, for "tiered_50_discount" is checked and appended to the list final.
- Then "bulk_5_discount" is checked and appended to the list final.
- All the above discount is appended to the list in the form of tuple which contains the discount price along with its name
- To find the most beneficial price to the customer final list is sorted and the first element is picked out and saved as fin_dis_price.
- To get only the discount price used inbuilt slicing Operation with the tuple.
- Shipping fee is calculated by using dividing it by 10 if the answer is integer multiplied it with 5
  If it is float added one to 1 then multiplied it with 5
- Wrap is added by check yes/no question asked earlier
- Then output is displayed in the following format
  1. Subtotal
  2. Discount applied, discount amt and the reduced amt
  3. Shipping fee
  4. Gift wrap fee
  5. Overall total included everything.

SCREENSHOTS

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.11.2 (tags/v3.11.2:878ead1, Feb  7 2023, 16:38:35) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
====================== RESTART: E:\python VIT\upda.py ========================
enter the quantity of product A12
enter the quantity of product B14
enter the quantity of product C15
product_A, 12, 240
product_B, 14, 560
product_C, 15, 750
Do you need to wrap product_A? (yes/no): yes
Do you need to wrap product_B? (yes/no): no
Do you need to wrap product_C? (yes/no): yes
sub total $ 1550
discount applied is bulk_10_discount , the discount amount is 155.0 discounted Amt of the Purchase 1395.0
the shipping fee for the product is $ 25
the gift wrapping fee is $ 27
the total bill after discount is $ 1447.0
>>>
```

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.11.2 (tags/v3.11.2:878ead1, Feb  7 2023, 16:38:35) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
====================== RESTART: E:\python VIT\upda.py ========================
enter the quantity of product A21
enter the quantity of product B22
enter the quantity of product C18
product_A, 21, 420
product_B, 22, 880
product_C, 18, 900
Do you need to wrap product_A? (yes/no): yes
Do you need to wrap product_B? (yes/no): yes
Do you need to wrap product_C? (yes/no): yes
sub total $ 2200
discount applied is tiered_50_discount , the discount amount is 450.0 discounted Amt of the Purchase 1750.0
the shipping fee for the product is $ 35
the gift wrapping fee is $ 61
the total bill after discount is $ 1846.0
>>>
```

```
enter the quantity of product A 10
enter the quantity of product B 1
enter the quantity of product C 7
product_A, 10, 200
product_B, 1, 40
product_C, 7, 350
Do you need to wrap product_A? (yes/no): yes
Do you need to wrap product_B? (yes/no): no
Do you need to wrap product_C? (yes/no): no
sub total $ 590
discount applied is flat_10_discount , the discount amount is 10 discounted Amt of the Purchase 580
the shipping fee for the product is $ 10
the gift wrapping fee is $ 10
the total bill after discount is $ 600
```

FOR JAVASCRIPT CODE:

- Open vs code editor or any other online editor which supports javascript.
- Copy and paste the snippet into the workspace.
- In python we used list to store product ,price and quantity here we used array.
- As we know products A,B and C we declared it as constant
- And we declared all the array as also constants with the keyword const

- Var total_price_A is declared to store the value of product A ,similarly for other two
- Initial subtotal is calculated with the help of for loop
- All the 4 discount conditions are evaluated with if else statements
- And the values of total1,total2 and total3 are pushed in to the array called as final
- Then the array is sorted with sort() fun
- Then shipping fee and gift wrap fee is added .
- Then output is printed as mentioned

SCREENSHOTS:

```
node /tmp/1aytU4E9lW.js
Enter the quantity of product_A 21
Enter the quantity of product_B 1
Enter the quantity of product_C 1
Do you need to wrap product_A? (yes/no):yes
Do you need to wrap product_B? (yes/no):no
Do you need to wrap product_C? (yes/no):yes
product_A, 21, 420
product_B, 1, 40
product_C, 1, 50
sub total $ 510
discount applied is bulk_10_discount, the discount amount is 51, discounted Amt of the
    Purchase 459
the shipping fee for the product is $ 15
the gift wrapping fee is $ 22
the total bill after discount is $ 496
```

```
Enter the quantity of product_A31
Enter the quantity of product_B30
Enter the quantity of product_C21
Do you need to wrap product_A? (yes/no):no
Do you need to wrap product_B? (yes/no):yes
Do you need to wrap product_C? (yes/no):no
product_A, 31, 310
product_B, 30, 600
product_C, 21, 525
sub total $ 2870
discount applied is tiered_50_discount, the discount amount is 1435, discounted Amt of
    the Purchase 1435
the shipping fee for the product is $ 45
the gift wrapping fee is $ 30
the total bill after discount is $ 1510
```

```
Output                                                    Clear

node /tmp/1aytU4E9lW.js
Enter the quantity of product_A12
Enter the quantity of product_B14
Enter the quantity of product_C16
Do you need to wrap product_A? (yes/no):yes
Do you need to wrap product_B? (yes/no):yes
Do you need to wrap product_C? (yes/no):yes
product_A, 12, 240
product_B, 14, 560
product_C, 16, 400
sub total $ 1600
discount applied is tiered_50_discount, the discount amount is 400, discounted Amt of
    the Purchase 1200
the shipping fee for the product is $ 25
the gift wrapping fee is $ 42
the total bill after discount is $ 1267
```