# Aim:

You are tasked with creating a Python program to generate retail shop billing. The program should take input from the user for the following details:

- Customer name
- Date of purchase (in the format DD/MM/YYYY)
- · Number of items purchased

For each item, the program should prompt the user to enter the following details:

- · Item name
- Quantity
- Price per unit

The program should calculate the total bill amount and display the item-wise details along with the total bill amount.

Write a Python program to implement the retail shop billing system based on the above requirements. The program should use appropriate variables, input functions, loops, and calculations to generate the billing.

#### Input Format:

- Customer name (string)
- Date of purchase (string)
- Number of items purchased (integer)

#### For each item:

- · Item name (string)
- Quantity (integer)
- Price per unit (float)

## **Output Format:**

- Display the customer name and date of purchase.
- Display the item-wise details including item name, quantity, price per unit, and total cost for each item.
- · Display the total bill amount.

## Source Code:

### retailBilling.py

```
#Type Content here...
na=input('Customer name: ')
d=input("Date of purchase (DD/MM/YYYY): ")
n=int(input("Number of items purchased: "))
print("----Retail Shop Billing----")
print("Customer Name:",na)
print("Date of Purchase:",d)
print("Item-wise Details:")
print("Item Name\tQuantity\tPrice Per Unit\tTotal Cost")
print("-----")
totamt=0
for i in range(1,n+1):
  print("Item",i)
  x=input("Item name: ")
  q=int(input("Quantity: "))
  p=int(input("Price per unit: "))
```

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```
amt=p*q
   print(x,q,'%.1f'%p,"%.2f"%amt,sep='\t\t')
   totamt=totamt+amt
print("Total Bill Amount:","%.1f"%totamt)
```

# Execution Results - All test cases have succeeded!

| Test Case - 1                             |                              |                  |  |  |  |  |  |
|---|------------------------------|------------------|--|--|--|--|--|
| User Output                               |                              |                  |  |  |  |  |  |
| Customer name: Harry                      |                              |                  |  |  |  |  |  |
| Date of purchase (DD/MM/YYYY): 11/05/2023 |                              |                  |  |  |  |  |  |
| Number of items purchased: 2              | Number of items purchased: 2 |                  |  |  |  |  |  |
| Retail Shop Billing Jeans                 |                              |                  |  |  |  |  |  |
| Customer Name: Harry Jeans                |                              |                  |  |  |  |  |  |
| Date of Purchase: 11/05/2023 Jeans        |                              |                  |  |  |  |  |  |
| Item-wise Details: Jeans                  |                              |                  |  |  |  |  |  |
| Item Name Quantity                        | Price Per Unit               | Total Cost Jeans |  |  |  |  |  |
| Jeans                                     |                              |                  |  |  |  |  |  |
| Item 1 Jeans                              |                              |                  |  |  |  |  |  |
| Item name: Jeans                          |                              |                  |  |  |  |  |  |
| Quantity: 2                               |                              |                  |  |  |  |  |  |
| Price per unit: 399                       |                              |                  |  |  |  |  |  |
| Jeans 2                                   | 399.0                        | 798.00 Shirt     |  |  |  |  |  |
| Item 2 Shirt                              |                              |                  |  |  |  |  |  |
| Item name: Shirt                          |                              |                  |  |  |  |  |  |
| Quantity: 1                               |                              |                  |  |  |  |  |  |
| Price per unit: 299                       |                              |                  |  |  |  |  |  |
| Shirt 1                                   | 299.0                        | 299.00           |  |  |  |  |  |
| Total Bill Amount: 1097.0                 |                              |                  |  |  |  |  |  |

| User Output  Customer name: Catherine  Date of purchase (DD/MM/YYYY): 05/07/2023  Number of items purchased: 3Retail Shop Billing Tops  Customer Name: Catherine Tops  Date of Purchase: 05/07/2023 Tops  Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost Tops Tops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item name: Leggins  Item name: Leggins | Test Case - 2                             |           |       |                |  |  |  |
|--|---|-----------|-------|----------------|--|--|--|
| Date of purchase (DD/MM/YYYY): 05/07/2023  Number of items purchased: 3Retail Shop Billing Tops  Customer Name: Catherine Tops  Date of Purchase: 05/07/2023 Tops  Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost Tops Tops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins  | User Output                               |           |       |                |  |  |  |
| Number of items purchased: 3Retail Shop Billing Tops  Customer Name: Catherine Tops  Date of Purchase: 05/07/2023 Tops  Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost Tops Tops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins   | Customer name:                            | Catherine |       |                |  |  |  |
| Retail Shop Billing Tops  Customer Name: Catherine Tops  Date of Purchase: 05/07/2023 Tops  Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost Tops Tops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins   | Date of purchase (DD/MM/YYYY): 05/07/2023 |           |       |                |  |  |  |
| Customer Name: Catherine Tops  Date of Purchase: 05/07/2023 Tops  Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost Tops   | Number of items purchased: 3              |           |       |                |  |  |  |
| Date of Purchase: 05/07/2023 Tops  Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost TopsTops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins   | Retail Shop Billing Tops                  |           |       |                |  |  |  |
| Item-wise Details: Tops  Item Name Quantity Price Per Unit Total Cost TopsTops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins  | Customer Name: Catherine Tops             |           |       |                |  |  |  |
| Item Name Quantity Price Per Unit Total Cost TopsTops  Item 1 Tops Item name: Tops Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins   | Date of Purchase: 05/07/2023 Tops         |           |       |                |  |  |  |
| Tops  Item 1 Tops  Item name: Tops  Quantity: 3  Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins  | Item-wise Detail                          | ls: Tops  |       |                |  |  |  |
| Item 1 Tops Item name: Tops Quantity: 3 Price per unit: 299 Tops 3 299.0 897.00 Leggins Item 2 Leggins Item name: Leggins  |   |           |       |                |  |  |  |
| Item name: Tops Quantity: 3 Price per unit: 299 Tops 3 299.0 897.00 Leggins Item 2 Leggins Item name: Leggins  |   |           |       | Tops           |  |  |  |
| Quantity: 3 Price per unit: 299 Tops 3 299.0 897.00 Leggins Item 2 Leggins Item name: Leggins  | Item 1 Tops                               |           |       |                |  |  |  |
| Price per unit: 299  Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins   | Item name: Tops                           |           |       |                |  |  |  |
| Tops 3 299.0 897.00 Leggins  Item 2 Leggins  Item name: Leggins  | Quantity: 3                               |           |       |                |  |  |  |
| Item 2 Leggins Item name: Leggins  | Price per unit:                           | 299       |       |                |  |  |  |
| Item name: Leggins   | Tops                                      | 3         | 299.0 | 897.00 Leggins |  |  |  |
|  | Item 2 Leggins                            |           |       |                |  |  |  |
|  | Item name: Leggins                        |           |       |                |  |  |  |
| Quantity: 2  | Quantity: 2                               |           |       |                |  |  |  |
| Price per unit: 199  | Price per unit:                           | 199       |       |                |  |  |  |
| Leggins 2 199.0 398.00 Jeans   | Leggins                                   | 2         | 199.0 | 398.00 Jeans   |  |  |  |
| Item 3 Jeans   |   |           |       |                |  |  |  |

| Item name: Jeans       |       |         |  |
|------------------------|-------|---------|--|
| Quantity: 4            |       |         |  |
| Price per unit: 459    |       |         |  |
| Jeans 4                | 459.0 | 1836.00 |  |
| Total Bill Amount: 313 | 1.0   |         |  |