



UNIVERSITI UTARA MALAYSIA
FIRST SEMESTER SESSION 2021/2022 (A211)

STIA1113 PROGRAMMING 1

KUMPULAN C

GROUP ASSIGNMENT

ASSIGNMENT 3

TOPIC: BEAUTY

SUB TOPIC: MAKEUP

LECTURER NAME:

PROF. MADYA DR. AZMAN B YASIN

PREPARED BY:

ANG KAI ZI

MATRIC NUMBER: 286043

INTRODUCTION:

“Princess” is a new cosmetic shop. “Princess” as a new cosmetic shop should have a complete inventory management to manage all the product information. The inventory management system should be fast, effortless and time saving. It can bring convenient to the shopper. “Princess” need a solution to count the quantity of the product in stock correctly.

The solution is use a stock control system. The information can be kept in the system and will not be lost. Worker can check information of the product easily and the system can show the information clearly such as Item Code, Item Name, Category, Supplier, Unit of Measurement (UOM), Unit Cost, Unit Price, Balance Quantity of the product and more information. Worker can update the quantity in the system manually when a product new arrived in Good Received Note part in the system. It will record the latest quantity when the worker keys in how many quantities of the product come into the shop and show the total quantity of the product they have now automatically. The workers also can check stock in shop of a product. Other than that, worker also can do the purchase return in Purchase Return part by using the system.

INSTRUCTION:

1. When the worker enters the system, it will show “WELCOME TO FAST COUNT”
2. Worker should login the system by insert their username and password. If they enter a wrong password, they should login again. After entering wrong password three times, system will mention they should wait three minutes to login system again.
3. Worker can check the product information by inserting the barcode of the product in Item part. After enter the barcode, system will automatically show the information such as Item Code, Item Name, Category, Supplier, Unit of Measurement (UOM), Unit Cost, Unit Price, Balance Quantity of the product and more information.
4. Worker should key in information of the supplier such as document number, supplier code and name, date, barcode of the product and quantity of the product that is new coming to shop in Good Received Note part.
5. At the same time, system will show “THE INFORMATION WAS RECORDED SUCCESSFULLY”.
6. To return the product which had problem, worker also need to key in the information in Purchase Return part.
7. The quantity will be deducted automatically by system.
8. After the worker finishes to key in the quantity and save the information, system will automatically count the latest quantity of the product and show the report to them and latest current quantity of the product to the worker in Item part.
9. Quit the system

This assignment is based on Assignment 1 and my topic, extend the work by using all the following Java topic:

1. Array
2. Passing array to methods
3. Method

Example:

100 lipsticks with different colors, 50 toners and 60 primers just arrived in the store. Some of them is unacceptable due to some quality problem, so it will be return to supplier.

Product	Current stock	New coming	Return	Calculation	New Current Stock
Perfume Lipstick (Neon Red)	20	50	10	$20 + 50 - 10 = 60$	60
Perfume Lipstick (Preppy Red)	10	50	6	$10 + 50 - 6 = 54$	54
Toner	10	80	8	$10 + 80 - 8 = 82$	82
Primer Tone Up Perfector - Blue	15	70	9	$15 + 70 - 9 = 76$	76

Item information:

Item code: 20020200 Item Name: Perfume Lipstick Colour: Neon Red Category: Lipstick Supplier: Princess Production UOM: PCS Unit Cost: RM36 Unit Price: RM120 Balance Quantity: 20	Item code: 20020210 Item Name: Perfume Lipstick Colour: Preppy Red Category: Lipstick Supplier: Princess Production UOM: PCS Unit Cost: RM36 Unit Price: RM120 Balance Quantity: 10
Item code: 20010156 Item Name: Perfume Toner Category: Toner Supplier: Princess Production UOM: BTL Unit Cost: RM18 Unit Price: RM60 Balance Quantity: 10	Item code: 20030232 Item Name: Perfume Primer Colour: Tone Up Perfector - Blue Category: Primer Supplier: Princess Production UOM: PCS Unit Cost: RM15 Unit Price: RM60 Balance Quantity: 15

*Green – Key in

Stock in:

Document Number: DO100124

Supplier code: PP5566

Supplier: Princess Production

Date:26/01/2022

Barcode	Name	Quantity
20020200	Perfume Lipstick (Neon Red)	50
20020210	Perfume Lipstick (Preppy Red)	50
20010156	Perfume Toner	80
20030232	Perfume Primer Tone Up Perfector - Blue	70

Press Enter, the information will be saved.

Purchase Return:

Document Number: PR100056

Supplier code: PP5566

Supplier: Princess Production

Date:26/01/2022

Barcode	Name	Quantity	Reason
20020200	Perfume Lipstick (Neon Red)	10	Damaged Packaging
20020210	Perfume Lipstick (Preppy Red)	6	Damaged Packaging
20010156	Perfume Toner	8	Broken Bottle
20030232	Perfume Primer	9	Damaged Packaging

Press Enter, the information will be saved.

Latest Item Information:

Item code: 20020200 Item Name: Perfume Lipstick Colour: Neon Red Category: Lipstick Supplier: Princess Production UOM: PCS Unit Cost: RM36 Unit Price: RM120 Balance Quantity: 60	Item code: 20020210 Item Name: Perfume Lipstick Colour: Preppy Red Category: Lipstick Supplier: Princess Production UOM: PCS Unit Cost: RM36 Unit Price: RM120 Balance Quantity: 54
Item code: 20010156 Item Name: Perfume Toner Category: Toner Supplier: Princess Production UOM: BTL Unit Cost: RM18 Unit Price: RM60 Balance Quantity: 82	Item code: 20030232 Item Name: Perfume Primer Colour: Tone Up Perfector - Blue Category: Primer Supplier: Princess Production UOM: PCS Unit Cost: RM15 Unit Price: RM60 Balance Quantity: 76

ALGORITHM

Pseudocode:

Start

Input **String [] colors1** and **String [] colors2**

Procedure login()

 Import Scanner

 Display “WELCOME”, “Please log in your account.”

 For time = 0; time >=0; time ++

 Show “Username:”

 Read Username

 Show “Password”

 Read Password

 If password right

 Display “Login Successfully....”

 End if

 Else password wrong

 Display “Password wrong. Please login again.”

 End For

End Procedure login()

Procedure process(String [] colors1, String [] colors2)

control = **menu()**

Function menu()

 Import Scanner

 Display String [] menu

 Read control

Return control

End function

If control = 1

While True

Display “[ITEM]”

Show “Barcode:”

Read barcode

If barcode1 = 20020200

End if

Else If barcode1 = 20020210

End else if

Else If barcode1 = 20010156

End else if

Else if barcode1 = 20030232

End else if

Show Item Name, Category, Supplier, UOM, Unit Cost, Unit Price and Balance Quantity
based on barcode entered

Display “Do you want to search another item information” “[1] YES [2] NO”

Read your selection

int a = 2

If choose 2 continue to next part
End if
End while
End if

Display function menu()

If control = 2
Display “[GOOD RECEIVED NOTE]”
Show information should enter by user such as Document Number, Supplier Code, Supplier Name, Date and Item Barcode and Quantity.
Read information enter by user.
Show report about the information.
End if

Display function menu()

If control = 3
Display “[PURCHASE RETURN]”
Show information should enter by user such as Document Number, Supplier Code, Supplier Name, Date and Item Barcode, Quantity and Reason.
Read information enter by user.
Show report about the information.
End if

Calculate New Current Stock = Current Stock before + quantity received – quantity returned

Display function menu()

If control = 1 (Choose 1 to check new current stock for each item.)
While True
Display “[ITEM]”
Show “Barcode:”
Read barcode
If barcode1 = 20020200
End if
If barcode1 = 20020210
End else if
Else If barcode1 = 20010156
End else if
Else if barcode1 = 20030232
End else if
Show Item Name, Category, Supplier, UOM, Unit Cost, Unit Price and Balance Quantity based on barcode entered
Display “Do you want to search another item information” “[1] YES [2] NO”
Read your selection
int b = 2
If choose 2 continue to next part
End if

End while

End if

End procedure process(String [] colors1, String [] colors2)

Procedure quit()

Show “Do you want to quit program?”

While true

Display “[1] YES [2] NO”

Read your selection

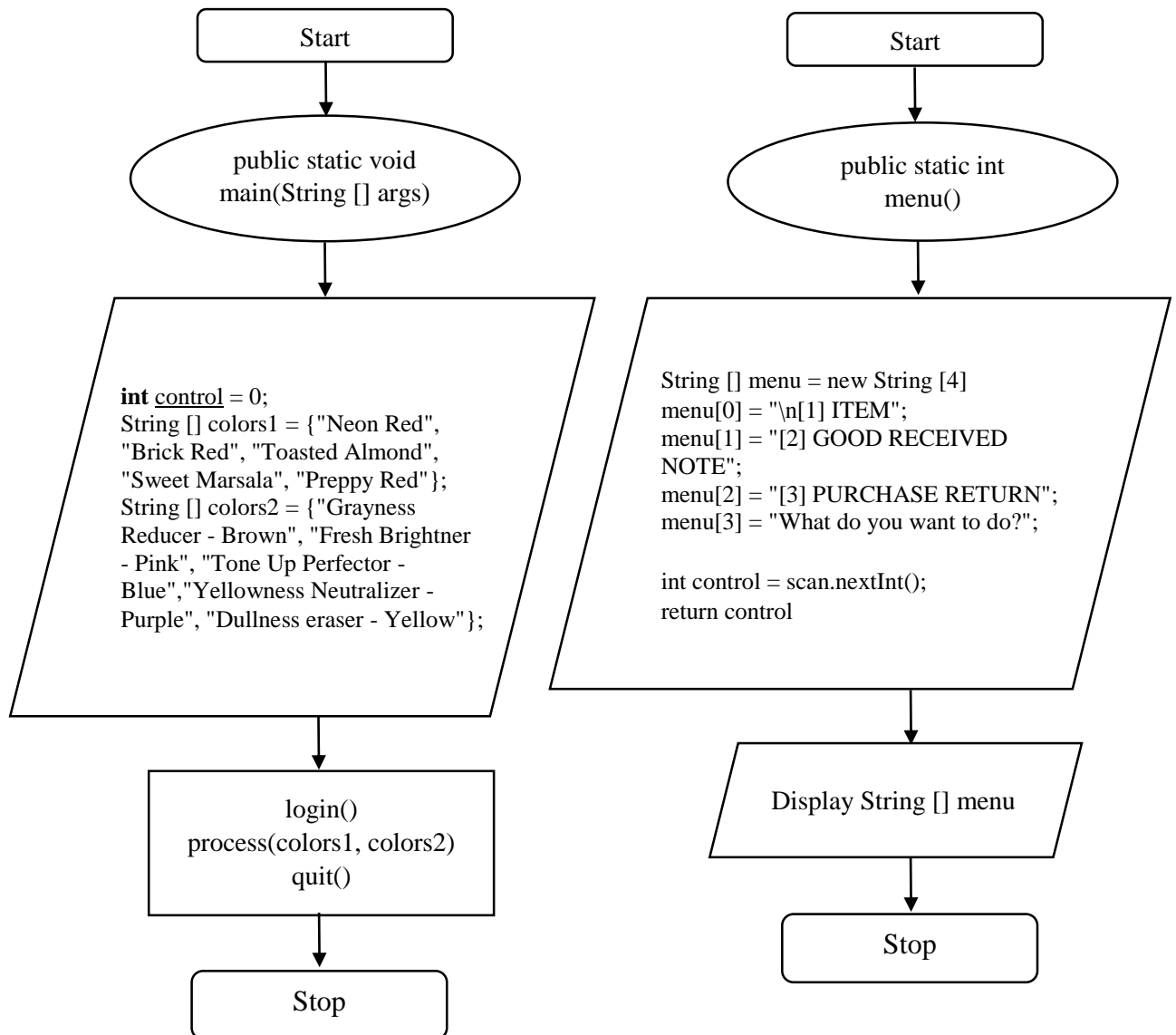
Int c =1

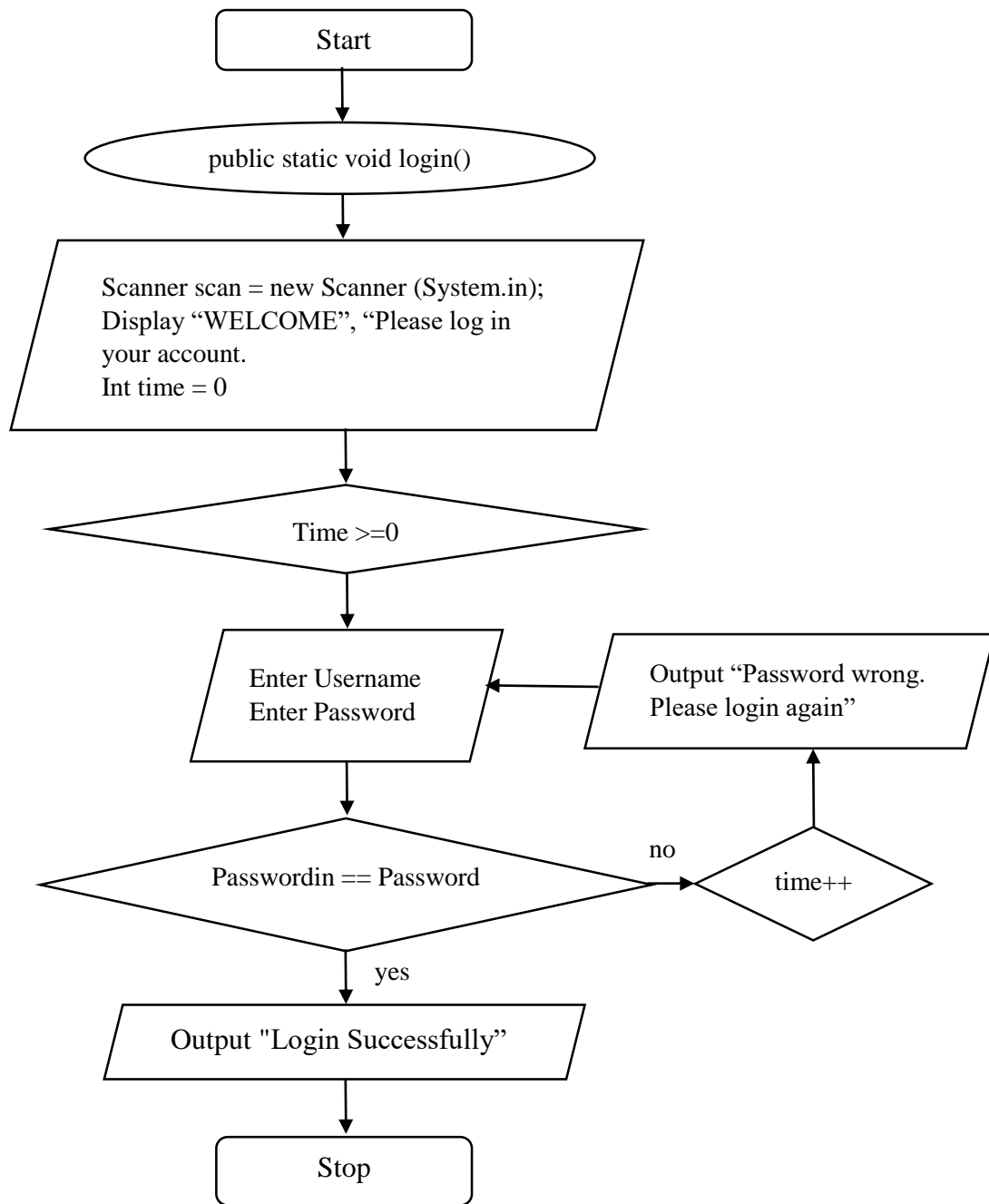
If choose 1

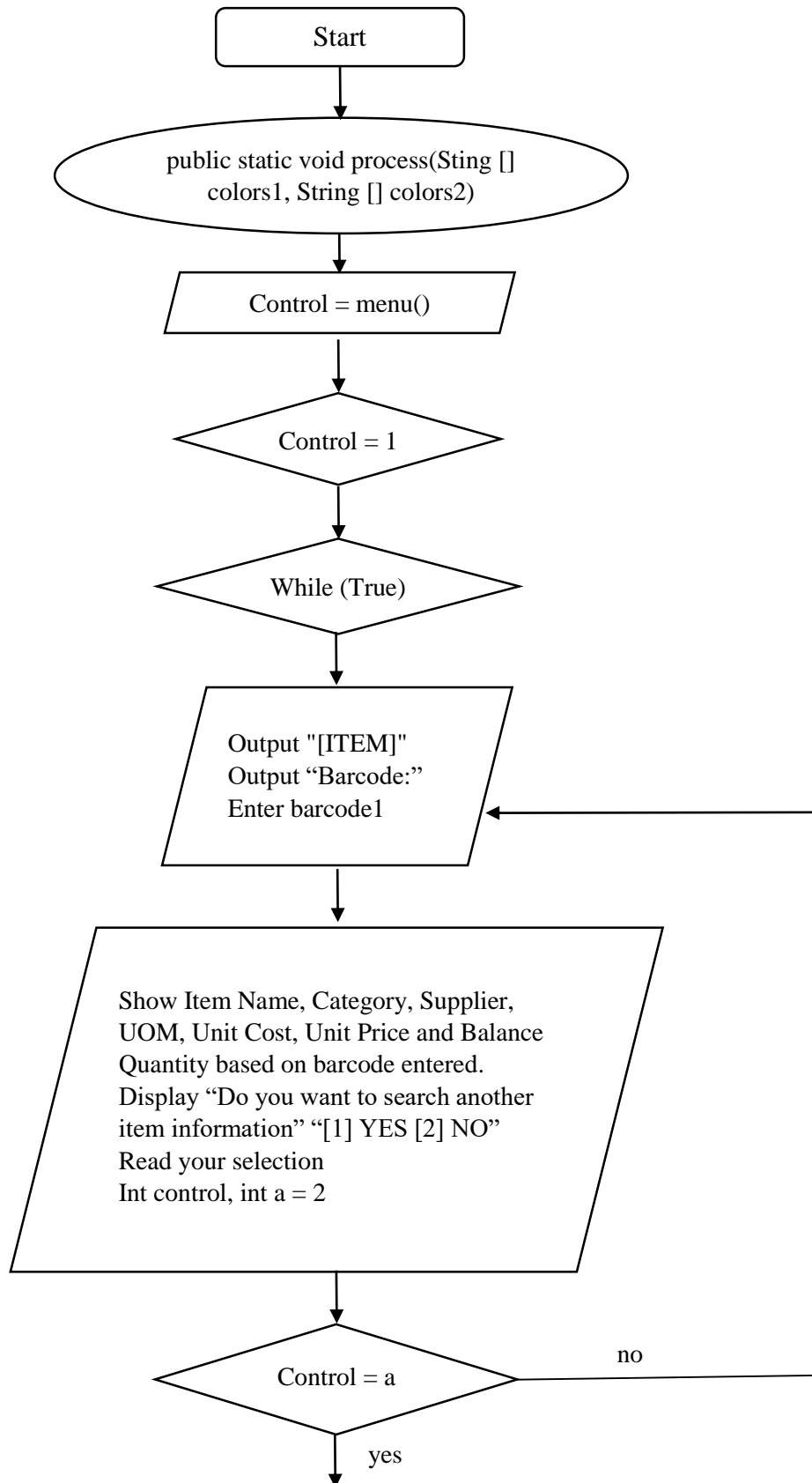
Display “Thank you”

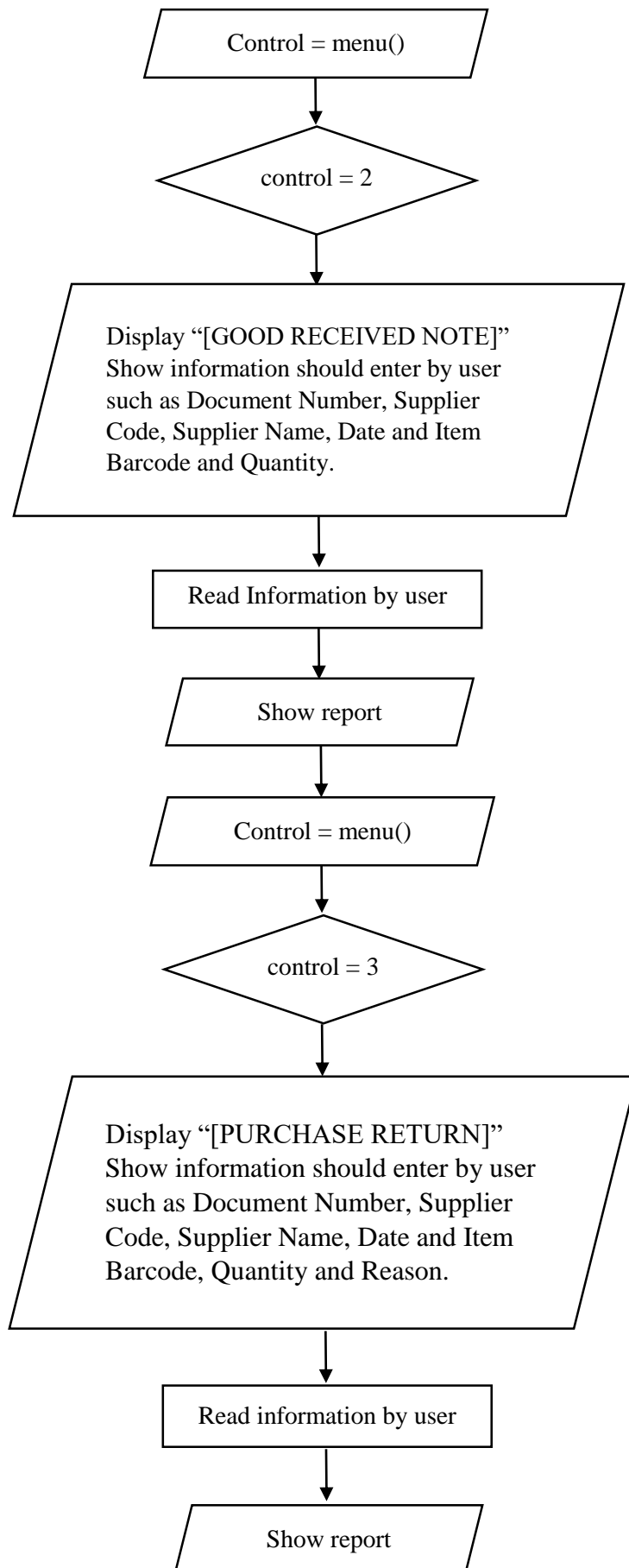
End procedure quit()

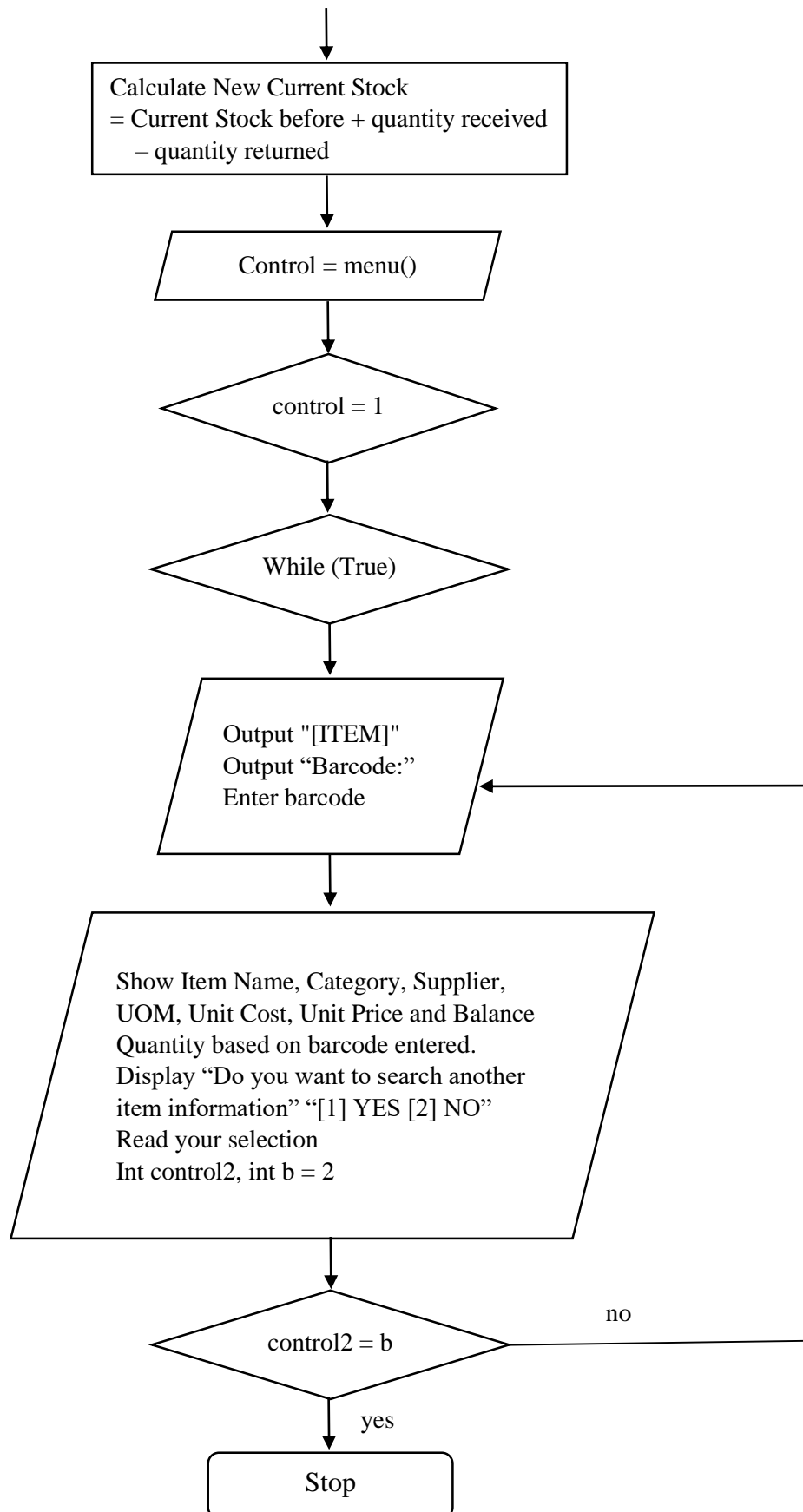
Flowchart:

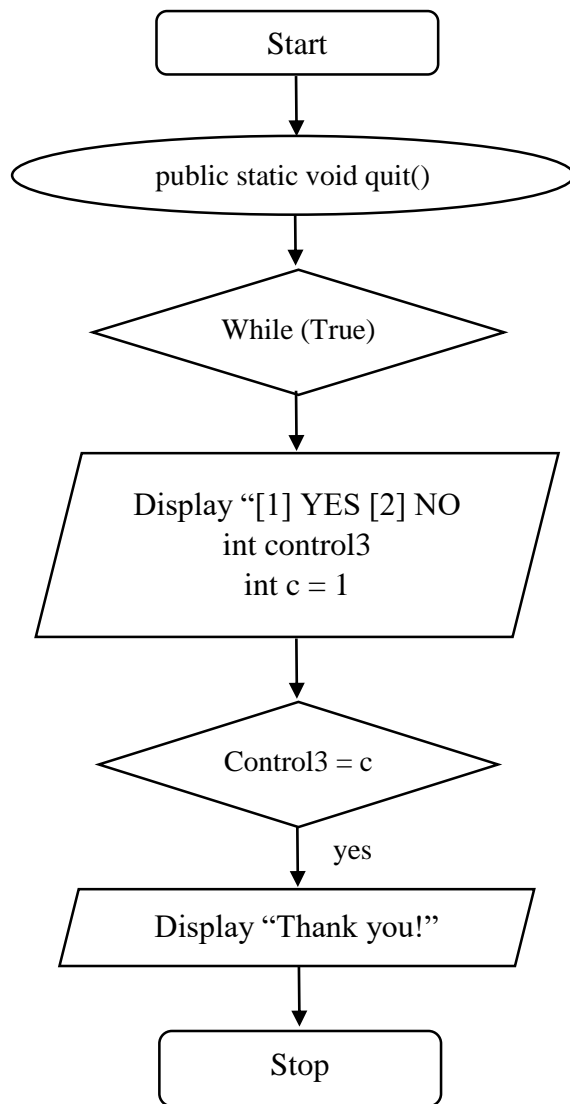












Coding:

```
package assignment3;
import java.util.Scanner;
public class Makeup3new {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int control = 0;
        String [] colors1 = {"Neon Red", "Brick Red", "Toasted Almond", "Sweet Marsala", "Preppy Red"}; //LIPSTICK
        String [] colors2 = {"Grayness Reducer - Brown", "Fresh Brightner - Pink", "Tone Up Perfector - Blue",
                             "Yellowness Neutralizer - Purple", "Dullness eraser - Yellow"}; //PRIMER

        login();
        process(colors1, colors2);
        quit();
    }

    public static void login() {
        String usernamein;
        int passwordin;
        int password = 123456;

        Scanner scan = new Scanner (System.in);

        System.out.println(" 0      0      0 0 0 0 0 0 0 0 0          0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0");
        System.out.println(" 0     0 0      0 0      0      0          0      0      0 0      0 0      0 0");
        System.out.println(" 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0");
        System.out.println(" 0 0      0 0      0      0          0      0      0 0      0 0      0 0");
        System.out.println(" 0      0      0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0");

        System.out.println("\nPlease log in your account.");

        for (int time = 0; time >=0; time++) {
            System.out.print("Username: ");
            usernamein = scan.next();
            System.out.print("Password: ");
            passwordin = scan.nextInt();
            if (passwordin==password) {
                System.out.println("Login successfully....");
                break;
            }
            else
                System.out.println("Password wrong. Please login again.");
            System.out.println();
        }
    }

    public static int menu() {
        Scanner scan = new Scanner (System.in);
        String [] menu = new String [4];
        menu[0] = "\n[1] ITEM";
        menu[1] = "[2] GOOD RECEIVED NOTE";
        menu[2] = "[3] PURCHASE RETURN";
        menu[3] = "What do you want to do?";

        for (int i = 0; i < menu.length; i++) {
            System.out.println(menu[i] + " ");
        }
        int control = scan.nextInt();
        return control;
    }

    public static void process(String [] colors1, String [] colors2) {
        Scanner scan = new Scanner (System.in);
        String usernamein, dn1, dn2, suppliercode1, suppliercode2, suppliername1, suppliername2, date1, date2, r1, r2, r3, r4;
        int control, control2;
        int barcode1, barcode2, barcode3, barcode4, barcode5, barcode6, barcode7, barcode8, barcode9;
        int bq1 = 20, bq2 = 10, bq3 = 10, bq4 = 15, q1=0, q2=0, q3=0, q4=0, q5=0, q6=0, q7=0, q8 = 0;
        control = menu();
        if (control == 1) {
            while (true) {
                System.out.println("\n[ITEM]");
                System.out.print("BARCODE:");
                barcode1 = scan.nextInt();

                if (barcode1 == 20020200){
                    System.out.println("Item Name: Perfume Lipstick"); // barcode = 20020200
                    System.out.println("Category: Lipstick");
                    System.out.println("Supplier: Princess Production");
                    System.out.println("Colour: " + colors1[0]);
                    System.out.println("UOM: PCS");
                    System.out.println("Unit Cost: RM36");
                    System.out.println("Unit Price: RM120");
                    System.out.println("Balance Quantity: " + bq1); //bq1
                }
            }
        }
    }
}
```

```

else if (barcode1 == 20020210) {
    System.out.println("Item Name: Perfume Lipstick"); // barcode = 20020210
    System.out.println("Category: Lipstick");
    System.out.println("Supplier: Princess Production");
    System.out.println("Colour: " + colors1[4]);
    System.out.println("UOM: PCS");
    System.out.println("Unit Cost: RM36");
    System.out.println("Unit Price: RM120");
    System.out.println("Balance Quantity: " + bq2); //bq1
}

else if (barcode1 == 20010156) {
    System.out.println("Item Name: Perfume Toner"); // barcode = 20010156
    System.out.println("Category: Toner");
    System.out.println("Supplier: Princess Production");
    System.out.println("UOM: BTL");
    System.out.println("Unit Cost: RM18");
    System.out.println("Unit Price: RM60");
    System.out.println("Balance Quantity: " + bq3); //bq2
}

else if (barcode1 == 20030232) {
    System.out.println("Item Name: Perfume Primer"); // barcode = 20030232
    System.out.println("Category: Primer");
    System.out.println("Supplier: Princess Production");
    System.out.println("Colour: " + colors2[2]);
    System.out.println("UOM: BTL");
    System.out.println("Unit Cost: RM15");
    System.out.println("Unit Price: RM60");
    System.out.println("Balance Quantity: " + bq4); //bq3
}

System.out.println("\nDo you want to search another item information?");
System.out.println("[1] YES [2] NO");
control2 = scan.nextInt();
int a = 2;
if (control2==a){
    break;
}
}

}

control=menu();
if (control == 2) {
    System.out.println("\n[GOOD RECEIVED NOTE]");
    System.out.print("Document Number: "); //dn
    dn1 = scan.nextInt();
    System.out.print("Supplier Code: ");
    suppliercode1 = scan.nextInt();
    System.out.print("Supplier Name: ");
    suppliername1 = scan.nextInt();
    System.out.print("Date: ");
    date1 = scan.nextInt();

    System.out.println("\nItem Barcode: ");
    barcode2 = scan.nextInt(); // barcode = 20020200
    System.out.print("Item Name: Perfume Lipstick (" + colors1[0] + ")");
    System.out.print("\nQuantity: ");
    q1 = scan.nextInt();

    System.out.println("\nItem Barcode: ");
    barcode3 = scan.nextInt(); // barcode = 20020210
    System.out.print("Item Name: Perfume Lipstick (" + colors1[4] + ")");
    System.out.print("\nQuantity: ");
    q2 = scan.nextInt();

    System.out.println("\nItem Barcode: ");
    barcode4 = scan.nextInt(); // barcode = 20010156
    System.out.print("Item Name: Perfume Toner");
    System.out.print("\nQuantity: ");
    q3 = scan.nextInt();

    System.out.println("\nItem Barcode: ");
    barcode5 = scan.nextInt(); // barcode = 20030232
    System.out.print("Item Name: Perfume Primer (" + colors2[2] + ")");
    System.out.print("\nQuantity: ");
    q4 = scan.nextInt();

    System.out.println("\nInformation has been saved. Here is your report.");
    System.out.println("\nDocument Number: " + dn1); //dn
    System.out.println("Supplier Code: " + suppliercode1);
    System.out.println("Supplier Name: " + suppliername1);
    System.out.println("Date: " + date1);
    System.out.println("Barcode: \t\t\t Item Name: \t\t\t Quantity: ");
    System.out.println(barcode2 + "\tPerfume Lipstick (" + colors1[0] + ") \t\t\t " + q1);
    System.out.println(barcode2 + "\tPerfume Lipstick (" + colors1[4] + ") \t\t\t " + q2);
    System.out.println(barcode3 + "\tPerfume Toner \t\t\t " + q3);
    System.out.println(barcode4 + "\tPerfume Primer (" + colors2[2] + ") " + q4);
}
}

```



```

control = menu();
if (control == 3) {
    System.out.println("\n[PURCHASE RETURN]");
    System.out.print("Document Number: "); //dn2
    dn2 = scan.nextInt();
    System.out.print("Supplier Code: ");
    suppliercode2 = scan.nextInt();
    System.out.print("Supplier Name: ");
    suppliername2 = scan.nextInt();
    System.out.print("Date: ");
    date2 = scan.nextInt();

    System.out.println("\nItem Barcode: "); // barcode = 20020200
    barcode6 = scan.nextInt();
    System.out.print("Item Name: Perfume Lipstick (" + colors1[0] + ")");
    System.out.print("\nQuantity: ");
    q5 = scan.nextInt();
    System.out.print("Reason: ");
    r1 = scan.nextInt();

    System.out.println("\nItem Barcode: "); // barcode = 20020210
    barcode7 = scan.nextInt();
    System.out.print("Item Name: Perfume Lipstick (" + colors1[4] + ")");
    System.out.print("\nQuantity: ");
    q6 = scan.nextInt();
    System.out.print("Reason: ");
    r2 = scan.nextInt();

    System.out.println("\nItem Barcode: "); // barcode = 20010156
    barcode8 = scan.nextInt();
    System.out.print("Item Name: Perfume Toner");
    System.out.print("\nQuantity: ");
    q7 = scan.nextInt();
    System.out.print("Reason: ");
    r3 = scan.nextInt();

    System.out.println("\nItem Barcode: "); // barcode = 20030232
    barcode9 = scan.nextInt();
    System.out.print("Item Name: Perfume Primer (" + colors2[2] + ")");
    System.out.print("\nQuantity: ");
    q8 = scan.nextInt();
    System.out.print("Reason: ");
    r4 = scan.nextInt();

    System.out.println("\nInformation has been saved. Here is your report.");
    System.out.println("\nDocument Number: " + dn2); //dn
    System.out.println("Supplier Code: " + suppliercode2);
    System.out.println("Supplier Name: " + suppliername2);
    System.out.println("Date: " + date2);
    System.out.println("Barcode: \t\t\t Item Name: \t\t\t Quantity: \t\t\t ");
    System.out.println(barcode6 + "\tPerfume Lipstick (" + colors1[0] + ") \t\t\t " + q5 + "\n\t\t\tReason:" + r1);
    System.out.println("\n" + barcode7 + "\tPerfume Lipstick (" + colors1[4] + ") \t\t\t " + q6 + "\n\t\t\tReason:" + r2);
    System.out.println("\n" + barcode8 + "\tPerfume Toner \t\t\t\t " + q7 + "\n\t\t\tReason:" + r3);
    System.out.println("\n" + barcode9 + "\tPerfume Primer (" + colors2[2] + ") " + q8 + "\n\t\t\tReason:" + r4);
}

int CQ1 = bq1 + q1 - q5;
int CQ2 = bq2 + q2 - q6;
int CQ3 = bq3 + q3 - q7;
int CQ4 = bq4 + q4 - q8;

control = menu();
if (control == 1) {
    while(true) {
        System.out.println("\n[ITEM]");
        System.out.print("BARCODE:");
        barcode8 = scan.nextInt();
        if (barcode8 == 20020200){
            System.out.println("Item Name: Perfume Lipstick"); // barcode = 20020200
            System.out.println("Category: Lipstick");
            System.out.println("Supplier: Princess Production");
            System.out.println("Colour: " + colors1[0]);
            System.out.println("UOM: PCS");
            System.out.println("Unit Cost: RM36");
            System.out.println("Unit Price: RM120");
            System.out.println("Balance Quantity: " + CQ1); //CQ1
        }
        else if (barcode8 == 20020210) {
            System.out.println("Item Name: Perfume Lipstick"); // barcode = 20020210
            System.out.println("Category: Lipstick");
            System.out.println("Supplier: Princess Production");
            System.out.println("Colour: " + colors1[4]);
            System.out.println("UOM: PCS");
            System.out.println("Unit Cost: RM36");
            System.out.println("Unit Price: RM120");
            System.out.println("Balance Quantity: " + CQ2); //CQ2
        }
    }
}

```

```

else if (barcode8 == 20010156) {
    System.out.println("Item Name: Perfume Toner"); // barcode = 20010156
    System.out.println("Category: Toner");
    System.out.println("Supplier: Princess Production");
    System.out.println("UOM: BTL");
    System.out.println("Unit Cost: RM18");
    System.out.println("Unit Price: RM60");
    System.out.println("Balance Quantity: " + CQ3); //CQ3
}

else if (barcode8 == 20030232) {
    System.out.println("Item Name: Perfume Primer"); // barcode = 20030232
    System.out.println("Category: Primer");
    System.out.println("Supplier: Princess Production");
    System.out.println("Colour: " + colors2[2]);
    System.out.println("UOM: BTL");
    System.out.println("Unit Cost: RM15");
    System.out.println("Unit Price: RM60");
    System.out.println("Balance Quantity: " + CQ4); //CQ4
}

System.out.println("\nDo you want to search another item information?");
System.out.println("[1] YES [2] NO");
control2 = scan.nextInt();
int b = 2;
if (control2==b){
    break;
}
}

}

public static void quit() {
    int control3=0;
    Scanner scan = new Scanner (System.in);
    System.out.println("\nDo you want to quit the program?");
    while (true) {
        System.out.println("[1] YES [2] NO");
        control3 = scan.nextInt();
        int c = 1;
        if (control3==c){
            break;
        }
    }
    System.out.println("Thank you!");
}
}
}

```

Output:

```
0      0      0 0 0 0 0 0 0 0 0 0      0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0      0 0      0 0      0      0      0      0      0      0      0      0
0      0 0 0 0      0 0 0 0 0 0 0 0 0 0      0      0      0      0      0 0 0 0 0 0 0 0
0 0      0 0      0      0      0      0      0      0      0      0      0      0
0      0      0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

Please log in your account.

Username: **ang**

Password: **123456**

Login successfully....

[1] ITEM

[2] GOOD RECEIVED NOTE

[3] PURCHASE RETURN

What do you want to do?

1

[ITEM]

BARCODE:**20020200**

Item Name: Perfume Lipstick

Category: Lipstick

Supplier: Princess Production

Colour: Neon Red

UOM: PCS

Unit Cost: RM36

Unit Price: RM120

Balance Quantity: 20

Do you want to search another item information?

[1] YES [2] NO

1

[ITEM]

BARCODE:**20020210**

Item Name: Perfume Lipstick

Category: Lipstick

Supplier: Princess Production

Colour: Preppy Red

UOM: PCS

Unit Cost: RM36

Unit Price: RM120

Balance Quantity: 10

Do you want to search another item information?

[1] YES [2] NO

1

[ITEM]

BARCODE:**20010156**

Item Name: Perfume Toner

Category: Toner

Supplier: Princess Production

UOM: BTL

Unit Cost: RM18

Unit Price: RM60

Balance Quantity: 10

Do you want to search another item information?

[1] YES [2] NO

1

[ITEM]

BARCODE:**20030232**

Item Name: Perfume Primer

Category: Primer

Supplier: Princess Production

Colour: Tone Up Perfector - Blue

UOM: BTL

Unit Cost: RM15

Unit Price: RM60

Balance Quantity: 15

Do you want to search another item information?

[1] YES [2] NO

2

[1] ITEM

[2] GOOD RECEIVED NOTE

[3] PURCHASE RETURN

What do you want to do?

2

[GOOD RECEIVED NOTE]

Document Number: D0100124
Supplier Code: PP5566
Supplier Name: PrincessProduction
Date: 26/01/2022

Item Barcode:
20020200
Item Name: Perfume Lipstick (Neon Red)
Quantity: 50

Item Barcode:
20020210
Item Name: Perfume Lipstick (Preppy Red)
Quantity: 50

Item Barcode:
20010156
Item Name: Perfume Toner
Quantity: 80

Item Barcode:
20030232
Item Name: Perfume Primer (Tone Up Perfector - Blue)
Quantity: 70

Information has been saved. Here is your report.

Document Number: D0100124
Supplier Code: PP5566
Supplier Name: PrincessProduction
Date: 26/01/2022

Barcode:	Item Name:	Quantity:
20020200	Perfume Lipstick (Neon Red)	50
20020200	Perfume Lipstick (Preppy Red)	50
20020210	Perfume Toner	80
20010156	Perfume Primer (Tone Up Perfector - Blue)	70

[1] ITEM
[2] GOOD RECEIVED NOTE
[3] PURCHASE RETURN
What do you want to do?
3

[PURCHASE RETURN]

Document Number: PR100056
Supplier Code: PP5566
Supplier Name: PrincessProduction
Date: 26/01/2022

Item Barcode:
20020200
Item Name: Perfume Lipstick (Neon Red)
Quantity: 10
Reason: DamagedPackaging

Item Barcode:
20020210
Item Name: Perfume Lipstick (Preppy Red)
Quantity: 6
Reason: DamagedPackaging

Item Barcode:
20010156
Item Name: Perfume Toner
Quantity: 8
Reason: BrokenBottle

Item Barcode:
20030232
Item Name: Perfume Primer (Tone Up Perfector - Blue)
Quantity: 9
Reason: DamagedPackaging

Information has been saved. Here is your report.

Document Number: PR100056

Supplier Code: PP5566

Supplier Name: PrincessProduction

Date: 26/01/2022

Barcode:	Item Name:	Quantity:
20020200	Perfume Lipstick (Neon Red) Reason:DamagedPackaging	10
20020210	Perfume Lipstick (Preppy Red) Reason:DamagedPackaging	6
20010156	Perfume Toner Reason:BrokenBottle	8
20030232	Perfume Primer (Tone Up Perfector - Blue) Reason:DamagedPackaging	9

[1] ITEM

[2] GOOD RECEIVED NOTE

[3] PURCHASE RETURN

What do you want to do?

1

[ITEM]

BARCODE:20020200

Item Name: Perfume Lipstick

Category: Lipstick

Supplier: Princess Production

Colour: Neon Red

UOM: PCS

Unit Cost: RM36

Unit Price: RM120

Balance Quantity: 60

Do you want to search another item information?

[1] YES [2] NO

1

[ITEM]

BARCODE:20020210

Item Name: Perfume Lipstick

Category: Lipstick

Supplier: Princess Production

Colour: Preppy Red

UOM: PCS

Unit Cost: RM36

Unit Price: RM120

Balance Quantity: 54

Do you want to search another item information?

[1] YES [2] NO

1

[ITEM]

BARCODE:20010156

Item Name: Perfume Toner

Category: Toner

Supplier: Princess Production

UOM: BTL

Unit Cost: RM18

Unit Price: RM60

Balance Quantity: 82

Do you want to search another item information?

[1] YES [2] NO

1

[ITEM]

BARCODE:20030232

Item Name: Perfume Primer

Category: Primer

Supplier: Princess Production

Colour: Tone Up Perfector - Blue

UOM: BTL

Unit Cost: RM15

Unit Price: RM60

Balance Quantity: 76

Do you want to search another item information?

[1] YES [2] NO

2

Do you want to quit the program?

[1] YES [2] NO

1

Thank you!



UNIVERSITI UTARA MALAYSIA

FIRST SEMESTER SESSION 2021/2022 (A211)

STIA1113 PROGRAMMING 1

KUMPULAN C

GROUP ASSIGNMENT

ASSIGNMENT 3

TOPIC: BEAUTY

SUB TOPIC: JEWELLERY

LECTURER NAME:

PROF. MADYA DR. AZMAN B YASIN

PREPARED BY:

SERA AFIQAH BINTI MUHAMAD YAHYA

MATRIC NUMBER: 286197

Identify the Problem:

Expensive gold price that include wage and how to buy it in pandemic.

Understand the Problem:

Gold is a human assets for their future but the price always keep changing for time to time. All customer that what to collect a gold jewellery have a different background for example from their financial. It is hard for them to collect some of their favourite design if the prices will keep increasing also because of the wage cost from the shop. Nowadays, because of the pandemic people also need to stay at home as a precautions and cannot easily go out for just buy a gold at the shop.

Alternative Ways to Solve the Problem:

1. Customer can still go to gold jewellery shop for getting their favourite design and the shop can give a service without any wages to the customer.
2. Make a website for the customer to buy a gold jewellery easily without any wages when they buy over the gram limit but still on their budget and they can still stay at home.

Select the Best Way to Solve the Problem for the Alternative Solutions List:

I will select the second alternative because I think nowadays it is more reasonable and easily for customer to buy a gold jewellery via website. This is because of the pandemic so they can still shopping even from home. When they buy from the website, shop not going to be crowded and become a new cluster also they not spend a long time in the shop to find a jewellery. From the website they can select their own budgets and also choose how much gram they want. If they buy over the gram limit they also do not to pay the wage but they need to pay for the delivery, packaging and insurance cost. It is shows that if they buy online from the website they also can get a reasonable prices and time to pick and add to their cart before pay.

Instructions that Enable to Solve the Problem Using Selected Solution:

1. Customer need to go to the shop website for choosing and buying their selected items.
2. They can select their own budget and choose how much gram they want on the filter section.
3. After they choose their budget and gram, they can start to find the jewellery for example a necklace, bracelet, ring or ear ring that suit their budget.
4. Then they can add to cart the item they choose.
5. After choosing the item, system will calculate the total of the gold and also the extra charges that included.
6. If they buy less than 5 gram, all of the extra charges will included such as wage, delivery, packaging and insurance.
7. But if they buy more than 5 gram, they will pay the extra charges without any wage.
8. Customers need to choose either they want to proceed or cancel the order.
5. When they proceed the order they need to fill in their data like name, e-mail, address, phone number and bank.

6. After the payment successful, the shop will e-mail their customer the invoice and they will send “**Thank you for your order**”.

Evaluate the Solution:

Regarding from this solution, gold jewellery shop should build a website to make it easier for customers to shop. They also need to put a filter at the upper of the website to help their customers to custom their own budget and gram that they want. Other than that, customers also do not have to pay a wage if they buy more than 5 gram from gold jewellery shop official website.

Example:

Gold price:	RM240/g
Wage cost:	RM250
Delivery cost:	RM30
Packaging cost:	RM15
Insurance:	RM50

Formula:

Type of purchasing	Formula	Total Payment
1. Buy less than 5 gram	<p>Ring 1.82g + Ear ring 1.2g = 3.02g</p> <p>Gold price * gold gram</p> <p>(RM240 * 1.82g) + (RM240 * 1.2g)</p> <p>RM 436.8 + RM 288 = RM 724.8</p> <p>Wage: RM 250</p> <p>Delivery: RM 30</p> <p>Packaging: RM 15</p> <p>Insurance: RM50</p> <p>Total gold jewellery + wage + delivery + packaging + insurance</p> <p>RM 724.8 + RM 250 + RM 30 + RM 15 + RM 50 = RM 1069.8</p>	RM 1069.8

<p>2. Buy more than 5 gram</p>	<p>Necklace 3.67g + Locket 2.87g + Bracelet 2.7g = 9.24g</p> <p>Gold price * gold gram</p> <p>(RM 240 * 3.67g) + (RM 240 * 2.87g) + (RM 240 * 2.7g)</p> <p>RM 880.8 + RM 688.8 + RM 648 = RM 2217.6</p> <p>No wage</p> <p>Delivery: RM 30</p> <p>Packaging: RM 15</p> <p>Insurance: RM 50</p> <p>Total gold jewellery + delivery + packaging + insurance</p> <p>RM 2217.6 + RM 30 + RM 15 + RM 50 = RM 2312.6</p>	<p>RM 2312.6</p>
--------------------------------	---	------------------

Algorithm:

1. Output gold jewellery list
2. Display showMessage ();
3. Input your budget range and gram
4. Calculate gold jewellery price
5. Calculate total payment for buy less than 5 gram
6. Gold price * gold gram
7. Display wage, delivery, packaging and insurance
8. Total gold jewellery + wage + delivery + packaging + insurance
9. Display order ();
10. Calculate total payment for buy more than 5 gram
11. Gold price * gold gram
12. Display delivery, packaging and insurance
13. Total gold jewellery + delivery + packaging + insurance
14. Display order ();
15. Output total payment
16. Input purchase confirmation code
17. Input name, phone number, bank, e-mail, and address

Pseudocode:

Start

Display gold jewellery list

Display showMessage ();

Output "Your budget range:"

Input budget

Output "Your gram:"

Input gram

If (gram < 5)

 Display array

 Calculate gold jewellery

 Gold price * gold gram

 Display wage, delivery, packaging and insurance cost

 Total gold jewellery + wage + delivery + packaging + insurance

 Output total payment

 Display order ();

 If (gram >= 5)

 Display array

 Calculate gold jewellery

 Gold price * gold gram

 Display delivery, packaging and insurance cost

 Total gold jewellery + delivery + packaging + insurance

 Output total payment

 Display order ();

End if

ShowMessage ();

Order ();

While (order != 1 && order != 2)

 Output "[1] Proceed order or [2] Cancel order

 Input order

If (order == 1)

Output "Enter your name:"

Input name

Output "Enter your phone number:"

Input phone number

Output "Payment via bank:"

Input payment

Output "Enter your e-mail:"

Input e-mail

Output "Enter your address:"

Input address

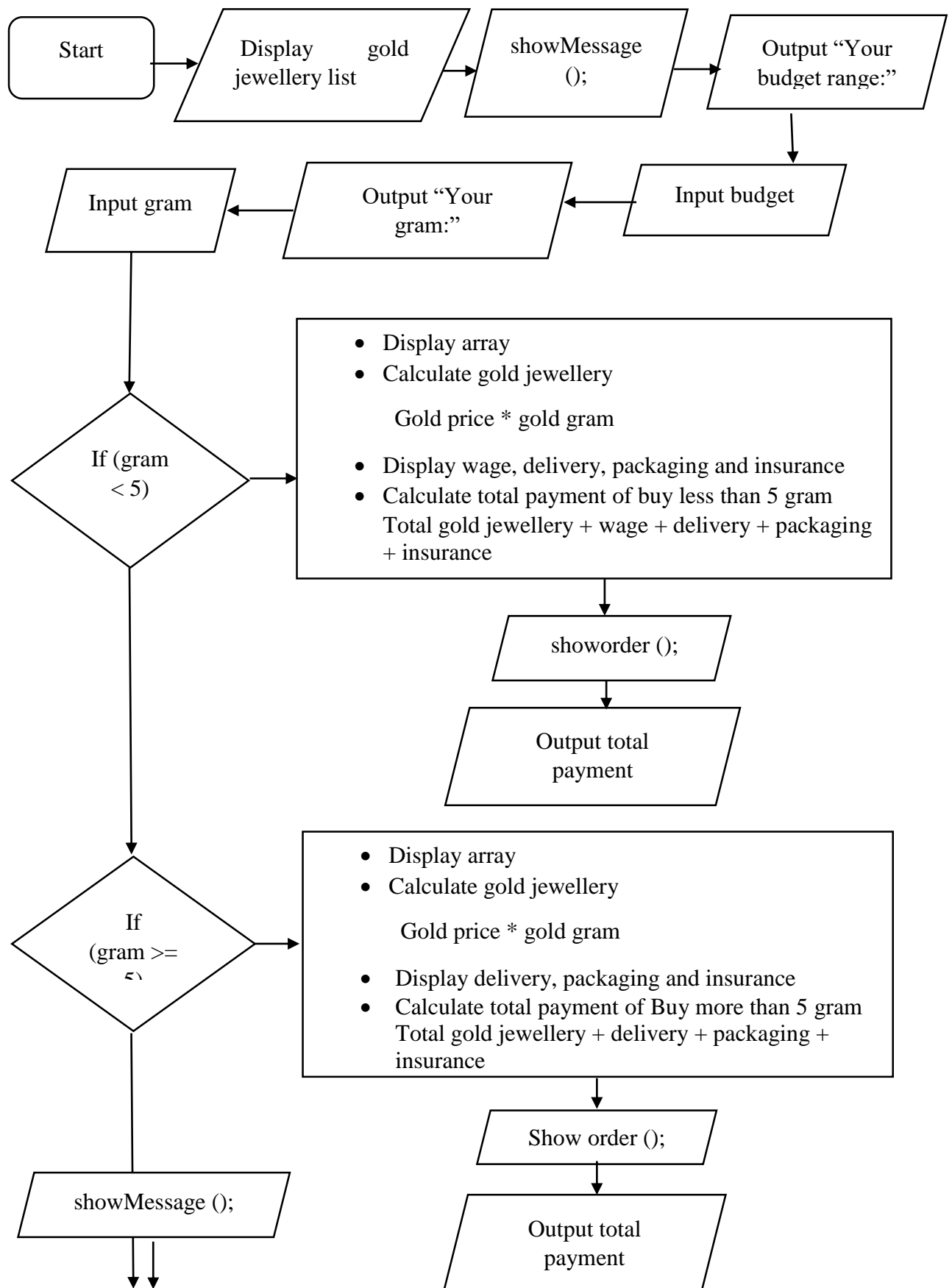
Else if (order ==2)

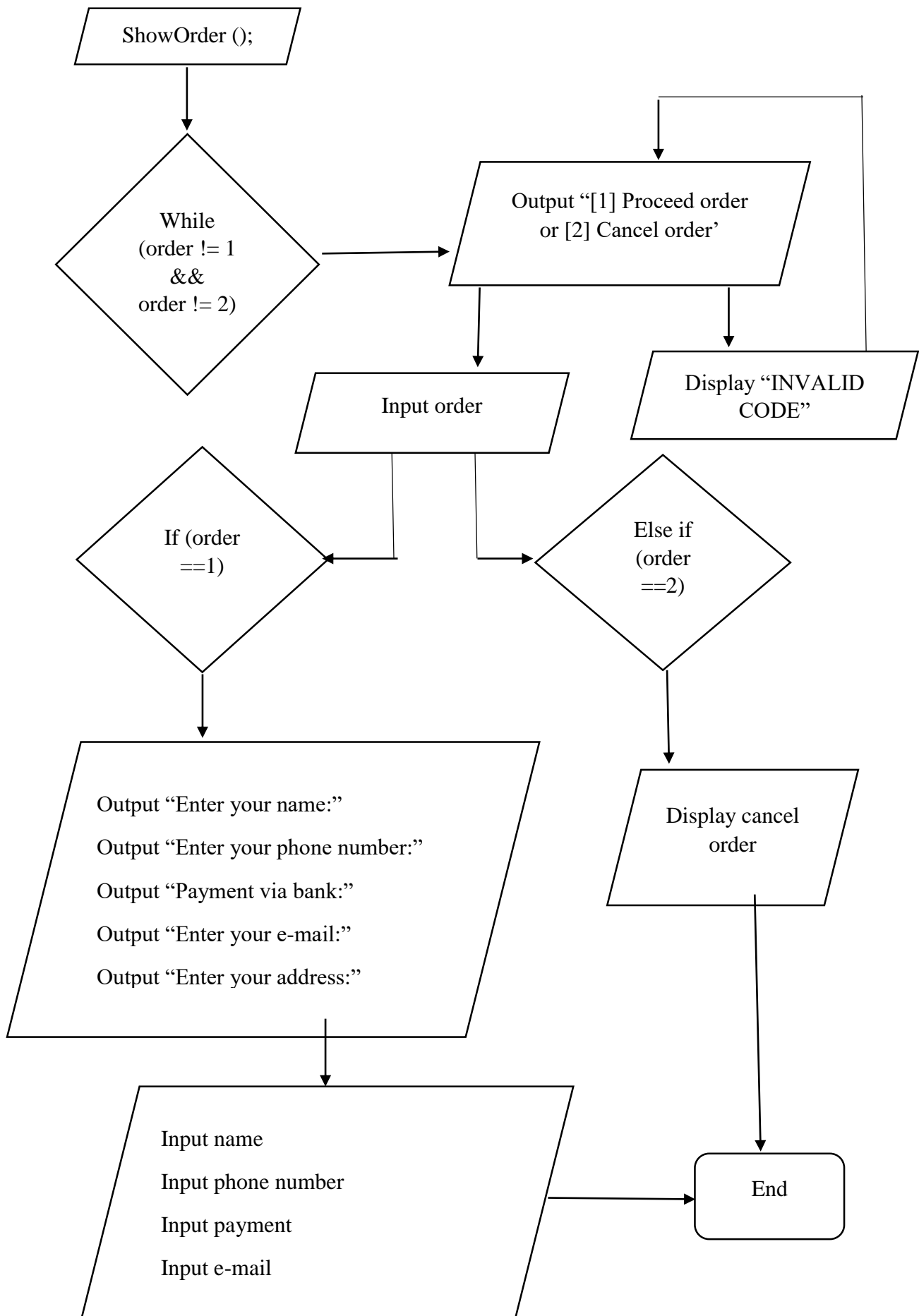
Display cancel order

End if

End

Flow Chart





Coding:

```
package test;

import java.util.Scanner;

public class testArraymethod {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner (System.in);

        int total;
        int total2;
        int total3;
        int total4;
        int budget;
        int gold = 240;
        int wage = 250;
        int delivery = 30;
        int packaging = 15;
        int insurance = 50;
        double gram;
        double ring = 2.1;
        double earring = 1.56;
        double necklace = 4.57;
        double locket = 2.5;
        double bracelet = 3.24;
        String[] item = new String [5];
        item[0] = "Ring: 2.1g";
        item[1] = "Ear Ring: 1.56g";
        item[2] = "Necklace: 4.57g";
        item[3] = "Locket: 2.5g";
        item[4] = "Bracelet: 3.24g";

        System.out.println("==WELCOME TO GOLD JEWELLERY SHOP==\n");

        showMessage();

        System.out.println("Your budget range: ");
        budget = sc.nextInt();

        System.out.println("Your gram: ");
        gram = sc.nextDouble();

        if(gram < 5) {
            String x = item[0];
            String y = item[1];
            System.out.println(x);
```



```

        System.out.println(y);
        total = (int)((gold * ring) + (gold * earring));
        System.out.println();
        System.out.println("Total gold price: RM" + total);
        System.out.println();
        System.out.println("Wage:RM250\n" + "Delivery:RM30\n" +
"Packaging:RM15\n" + "Insurance:RM50");
        total2 = (total + wage + delivery + packaging + insurance);
        System.out.println("-----");
        System.out.println("TOTAL: RM " + total2);
        System.out.println("-----");

        System.out.println();
        order();
    }

    if(gram >= 5) {
        String a = item[1];
        String b = item[2];
        String c = item[3];
        String d = item[4];
        System.out.println(a);
        System.out.println(b);
        System.out.println(c);
        System.out.println(d);
        total3 =(int)((gold * earring) + (gold * necklace) + (gold * locket)
+(gold * bracelet));
        System.out.println();
        System.out.println("Total gold price: RM" + total3);
        System.out.println();
        System.out.println( "Delivery:RM30\n" + "Packaging:RM15\n" +
"Insurance:RM50");
        total4 = (total3 + delivery + packaging + insurance);
        System.out.println("-----");
        System.out.println("TOTAL: RM " + total4);
        System.out.println("-----");

        System.out.println();
        order();
    }
}

public static void showMessage() {
    System.out.println("Please choose your budget range and gram.");
    System.out.println("Note: Less than 5g need to pay wage cost");
    System.out.println("\n");
}

public static void order() {
    Scanner sc = new Scanner (System.in);

    System.out.println("[1] Proceed Order or [2] Cancel Order");

```

```

        int order = sc.nextInt();

while (order != 1 && order != 2) {
    System.out.println("INVALID CODE");
    System.out.println("Please enter confirmation code again");
    order= sc.nextInt();
}

    if (order ==1) {

        System.out.println("Enter your name: ");
        String name = sc.next();

        System.out.println("Enter your phone number: ");
        String number = sc.next();

        System.out.println("Payment via bank: ");
        String bank = sc.next();

        System.out.println("Enter your e-mail: ");
        String email = sc.next();

        System.out.println("Enter your address: ");
        String address = sc.next();
        System.out.println("\n");

        System.out.println("THANK YOU FOR YOUR ORDER!");
    }

    else if (order ==2) {
        System.out.println("You have cancel your order");
        System.out.println("THANK YOU FOR YOUR VISIT!");
    }

}
}
}

```

Output:

==WELCOME TO GOLD JEWELLERY SHOP==

Please choose your budget range and gram.

Note: Less than 5g need to pay wage cost

Your budget range:

1500

Your gram:

4

Ring: 2.1g

Ear Ring: 1.56g

Total gold price: RM878

Wage:RM250

Delivery:RM30

Packaging:RM15

Insurance:RM50

TOTAL: RM 1223

[1] Proceed Order or [2] Cancel Order

1

Enter your name:

sera

Enter your phone number:

0197320295

Payment via bank:

maybank

Enter your e-mail:

sera@gmail.com

Enter your address:

205 jln molek 1

THANK YOU FOR YOUR ORDER!

OR

==WELCOME TO GOLD JEWELLERY SHOP==

Please choose your budget range and gram.

Note: Less than 5g need to pay wage cost

Your budget range:

1500

Your gram:

4

Ring: 2.1g

Ear Ring: 1.56g

Total gold price: RM878

Wage:RM250

Delivery:RM30

Packaging:RM15

Insurance:RM50

TOTAL: RM 1223

[1] Proceed Order or [2] Cancel Order

2

You have cancel your order

THANK YOU FOR YOUR VISIT!



UNIVERSITI UTARA MALAYSIA

FIRST SEMESTER SESSION 2021/2022 (A211)

STIA1113 PROGRAMMING 1

KUMPULAN C

GROUP ASSIGNMENT

ASSIGNMENT 3

TOPIC: BEAUTY

SUB TOPIC: PERFUME

LECTURER NAME:

PROF. MADYA DR. AZMAN B YASIN

PREPARED BY:

NUR AZYYATI ADLIN BINTI MOHD NASIR

MATRIC NUMBER: 286330

1. Identify the problem

Perfume is a mixture of fragrant essential oils or aroma compounds, fixatives and solvents, used to give the human body, animals, food, objects, and living-spaces an agreeable scent. It is usually in liquid form and used to give a pleasant scent to a person's body. The word perfume derives from the Latin *perfumare*, meaning "to smoke through". Perfumery, as the art of making perfumes, began in ancient Mesopotamia and Egypt, and was further refined by the Romans and the Arabs.

Typically, there are 5 common types of perfumes. These include *parfum*, *eau de parfum* (EDP), *eau de toilette* (EDT), *eau de cologne*, and *eau de fraiche*. The main difference between these five perfume types is their fragrance oil concentration. In general, *Eau de parfum* works great for the colder season because it is stronger in scent, heavier and oilier. Yet, you have to ensure you pick winter-friendly fragrance notes. *Eau de toilette* is ideal for the warmer seasons because of its lighter scent. However, the same as *eau de parfum*, you want to pick the right fragrance note combination. As a hack, purchase similarly scented *eau de parfum* or *eau de toilette* with an *eau de fraiche* so you can have a cheaper fragrance refreshing alternative throughout the day.

Among all the famous perfume shops, SugarBomb is included in one of them. SugarBomb conceptualized in 2015 in the United Kingdom when the founders met, where idea and direction of the company was discussed. The origin of 'SugarBomb' is derived from two different words, 'Sugar' and 'Bomb' representing the best in the perfumery. Together it signifies 'sweet fragrance that will blast the perfume industry'. SugarBomb planned to make categories of all the perfumes into men, women in EDP or EDT category, and also to other types of perfume which is *Parfum*, *Scarlet Edition* and also *Fruities Series* categories.



2. Understand the problem

Nowadays perfumes are widely used by people from all over the world, from different age, gender and culture. Nevertheless, customers find it difficult to make a choice of perfume to buy because they have to choose what category of perfume that they want. So, the SugarBomb online shop system needs to set up the category of perfume such as women, men, in EDT or EDP category, parfum category, scarlet edition category and fruities series category which is suitable for all people to choose.

3. Identify alternative ways to solve the problem

- i. Make the same perfume that can be used by men and women.
- ii. Make the categories of all the perfumes in the online shop.

4. Select the best way to solve the problem from the list of alternative solutions

- i. First alternative is not the best way because men and women have their own taste of perfumes. So, the perfume has to be categories in men and women and also for other types of perfume.
- ii. Second alternative is the best way because customers can choose what type of perfumes, they want that will suit their tastes. They can also buy a lot in one time, as example, if the customer is a girl, they can choose perfume from women categories and she can also buy for her husband from men categories. And also, if the customer is fruits lover, they can buy from fruities series and so on.

5. List instructions that enable you to solve the problem using the selected solution

- i. The user has to log in with username and password.
- ii. The system will show 'SUGARBOMB ONLINE SHOP' with the CATEGORY OR ACCOUNT.
- iii. After that, the user just needs to enter 1 to see categories and the list of categories will be display there.
- iv. In the category space, the system will show all the type of perfume in women and men from EDP or EDT perfume, scarlet edition, fruities series with the prices.
- v. After that, user can choose any categories that she / he wants.

- vi. Then, the list of perfume come out after user select the category and the system will ask how many perfume that user want to buy.
- vii. If the user wants to buy one only, user can proceed with the next question that ask by system.
- viii. The user needs to insert name of perfume that she / he chooses.
- ix. After that, the system will show add to cart the perfume that already choose by customer.
- x. The system will ask how many quantities that customer want. So, the customer needs to insert the quantity.
- xi. The system will make calculation of total price.
- xii. And the customer needs to pay of the perfume and customer's change will be calculated.
- xiii. The system will display "You have made the payment for this product. Thank you and come again".
- xiv. But, if the user wants to buy more than one perfumes, user can insert how many she / he wants to buy, and the system will be looping based on the total perfumes.
- xv. After user insert name of perfume that she / he wants to buy, the system will ask whether she/ he wants to choose other perfumes and if yes, the system will ask again what perfume that user wants.
- xvi. Lastly, the system will continue the process until "You have made the payment for this product. Thank you and come again" will be display.

6. Evaluate the solution

Categories of perfumes:

Categories
Women EDP / EDT
Men EDP / EDT
Parfum
Scarlet Edition
Fruity Series

Types of perfume in Women's Category:

Name	Price (EDP) for 30ml	Price (EDT) for 10 ml
Floral Blush	RM45.00	RM10.00
Floral Immortal	RM45.00	RM10.00
Fruity Rose	RM45.00	RM10.00
Fruity Selena	RM45.00	RM10.00
Fruity Sparkle	RM45.00	RM10.00
Sweet Bombshell	RM45.00	RM10.00
Sweet Coach	RM45.00	RM10.00
Sweet Fantasy	RM45.00	RM10.00
Vanillavie	RM45.00	RM10.00
Vanilla Poison	RM45.00	RM10.00

Types of perfume in Men's Category:

Name	Price (EDP) for 30ml	Price (EDT) for 10ml
Aromatic Adventurous	RM45.00	RM10.00
Aromatic Eros	RM45.00	RM10.00
Aromatic Legend	RM45.00	RM10.00
Citrus Code	RM45.00	RM10.00
Citrus Desire	RM45.00	RM10.00
Citrus Di Gio	RM45.00	RM10.00
Fruity Aventus	RM45.00	RM10.00
Spicy Million	RM45.00	RM10.00
Spicy Royalty	RM45.00	RM10.00
Spicy XS	RM45.00	RM10.00

Types of perfume in Parfum's Category:

Name	Price for 20ml
Intense	RM49.00
Blast	RM49.00
Julia	RM49.00

Isabelle	RM49.00
Elisa	RM49.00
Roselle	RM49.00
Layla	RM49.00

Types of perfume in Scarlet Edition's Category:

Name	Price for 30ml
Sakura	RM45.00
Vaila	RM45.00
Julia	RM45.00
Rare	RM45.00

Types of perfume in Fruity Series' Category:

Name	Price for 30ml
Mango Swirl	RM29.00
Baby Dew	RM29.00
Melon Moonlight	RM29.00
Apple Smoothie	RM29.00
Strawberry Crush	RM29.00

When user add to cart the perfumes that they choose, they will make the payment and if the user wants to buy more than one quantity:

The calculation will be (price * quantity)

When the user pays for the perfumes:

The calculation for change will be (pay – price).

If the user wants to buy more than one from different perfume

The calculation will be totalprice += price

7. Algorithm:

Declare username, password, choose, category, perfumeName, quantity, price, totalprice, pay, change, count, totalperfume, code,i.

Scan username, password, choose

Display category perfumes

Scan category

Display list of perfumes

ShowMessage()

Scan totalperfume,

If (totalperfume <= 1)

Scan perfumeName, quantity, price, totalprice,

totalprice = price * quantity

Print calculate1 (price, quantity,totalprice)

Scan pay

Print calculate2 (pay,totalprice,change)

change = pay – totalprice

Print showMessage2()

Else if (totalprice > 1)

Scan perfumeName, quantity, price

Scan code (Y/N) = 'y' && 'Y'

Scan totalprice,

totalprice += price

count++

Print calculate1 (price, quantity,totalprice)

Scan pay

Print calculate2 (pay,totalprice,change)

change = pay – totalprice

Print showMessage2()

8. Pseudocode:

START

Import.scanner

DECLARE username as string

DECLARE password, choose as int

INPUT login

OUTPUT “Enter your username”

INPUT username

OUTPUT “Enter your password”

INPUT password

showMessage()

Import.scanner

DECLARE perfumeName as string

DECLARE category as string

DECLARE totalperfume, pay, change as double

DECLARE code as char

DECLARE i as int

INITIAL count = 0

INITIAL quantity = 0

INITIAL price = 0

INITIAL totalprice = 0;

DECLARE WomenEDP, WomenEDT, MenEDP, MenEDT, Parfum, ScarletEdition,
FruitiesSeries as String array

OUTPUT "CATEGORY"

OUTPUT "Choose your perfume"

SWITCH (category)

CASE "womenedp"

CASE "WOMENEDP"

OUTPUT list of perfume

BREAK;

CASE "womenedt"

CASE "WOMENEDT"

OUTPUT list of perfume

BREAK;

CASE "menedp"

CASE "MENEDP"

OUTPUT list of perfume

BREAK;

CASE "menedt"

CASE "MENEDT"

OUTPUT list of perfume

BREAK;

CASE “parfum”

CASE “PARFUM”

OUTPUT list of perfume

BREAK;

CASE “scarletedition”

CASE “SCARLETEDITION”

OUTPUT list of perfume

BREAK;

CASE “fruitiesseries”

CASE “FRUITIESSERIES”

OUTPUT list of perfume

BREAK;

OUTPUT “How many perfume that you want”

INPUT totalperfume

IF (totalperfume <= 1)

OUTPUT “Choose your perfume

INPUT perfumeName

OUTPUT “How many quantity that you want”

INPUT quantity

OUTPUT “Enter the price”

INPUT price

CALCULATE totalprice = price * quantity

calculate1(price,quantity,totalprice)

OUTPUT totalprice

OUTPUT "Pay the perfume"

INPUT pay

calculate2 (pay,totalprice,change)

CALCULATE change = pay – totalprice

OUTPUT change

ELSE IF (totalperfume > 1)

DO

OUTPUT "Choose your perfume

INPUT perfumeName

OUTPUT "How many quantity that you want"

INPUT quantity

OUTPUT "Enter the price"

INPUT price

CALCULATE totalprice += price

count++;

calculate1 (price,quantity,totalprice)

INPUT CODE

WHILE code == 'y' OR code == 'Y'

OUTPUT totalprice

OUTPUT "Pay the perfume"

INPUT pay

calculate2 (pay,totalprice,change)

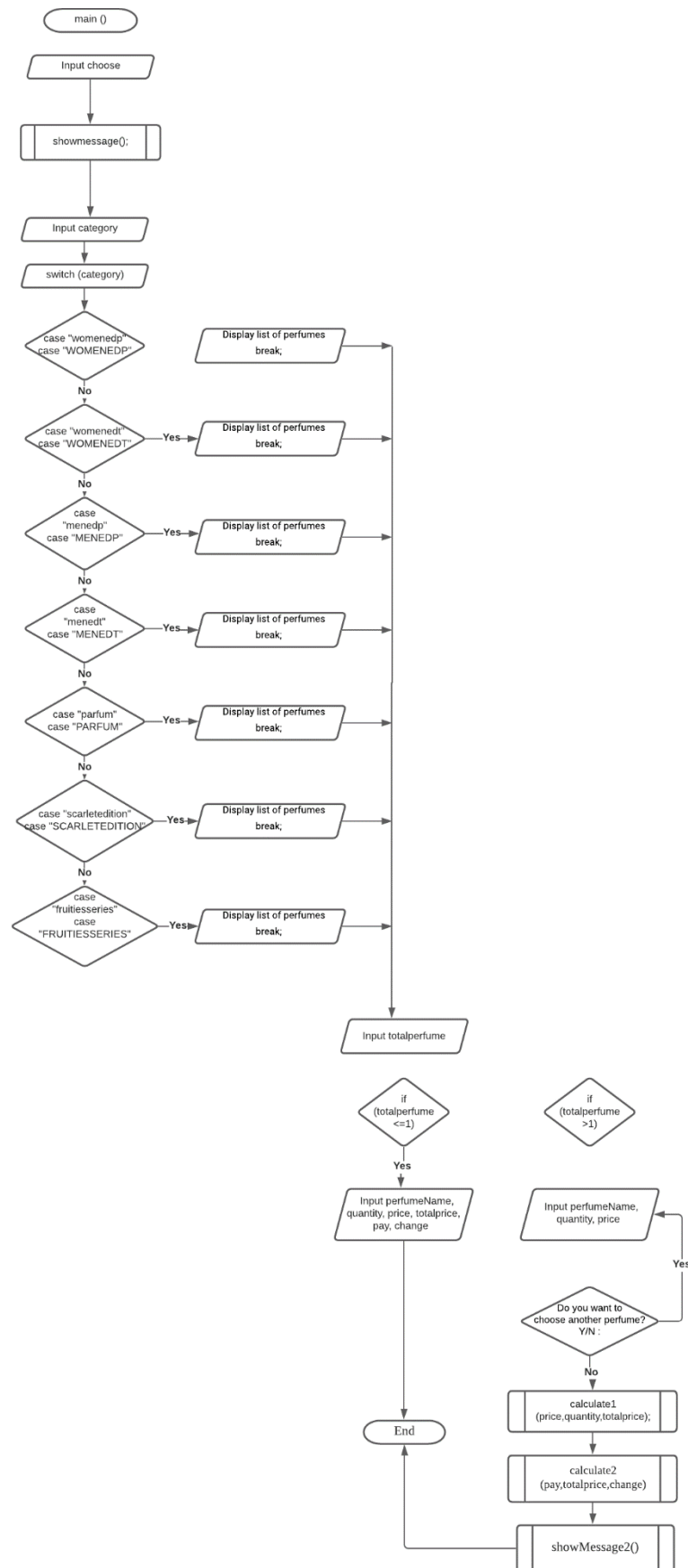
CALCULATE change = pay – totalprice

OUTPUT change

ShowMessage2()

END

9. Flowchart



10. Coding

```
package Assignment;

import java.util.Scanner;

public class Assignment3 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner input = new Scanner(System.in);

        String username;
        int password;
        int choose;

        System.out.println("Log in");
        System.out.print("Enter your username : ");
        username = input.nextLine();
        System.out.print("Enter your password : ");
        password = input.nextInt();

        System.out.println("-----");
        System.out.println("          SUGARBOMB ONLINE SHOP          ");
        System.out.println("-----");
        System.out.println("      CATEGORY          ACCOUNT      ");
        System.out.println("-----");

        System.out.print("Which one do you want to see (enter 1 to see category) : ");
        choose = input.nextInt();
```

```
System.out.println();
```

```
System.out.println();
```

```
System.out.println("Here are all the category of perfume in our shop: ");
```

```
System.out.println();
```

```
System.out.println("WOMEN EDP 30 ML");
```

```
System.out.println("WOMEN EDT 10 ML");
```

```
System.out.println("MEN EDP 30 ML");
```

```
System.out.println("MEN EDT 10 ML");
```

```
System.out.println("PARFUM");
```

```
System.out.println("SCARLET EDITION");
```

```
System.out.println("FRUITIES SERIES");
```

```
System.out.println();
```

```
showMessage();
```

```
}
```

```
public static void showMessage() {
```

```
Scanner input = new Scanner(System.in);
```

```
String perfumeName,category;
```

```
int totalperfume = 0;
```

```
double price = 0 ;
```

```
double pay = 0;
```

```
int quantity = 0;
```

```
int i = 0;
```

```
int count = 0;
```

```
double change = 0;
```

```
double totalprice = 0;
```

```
char code = 0;
```

```
String WomenEDP [] = {"Floral Blush", "Floral Immortal", "Fruity Rose", "Fruity Selena",  
"Fruity Sparkle", "Sweet Bombshell", "Sweet Coach", "Sweet Fantasy", "Vanillavie",  
"Vanilla Poison"};
```

```
String WomenEDT [] = {"Floral Blush", "Floral Immortal", "Fruity Rose", "Fruity Selena",  
"Fruity Sparkle", "Sweet Bombshell", "Sweet Coach", "Sweet Fantasy", "Vanillavie",  
"Vanilla Poison"};
```

```
String MenEDP [] = {"Aromantic Adventurous", "Aromatic Eros", "Citrus Code", "Citrus  
Desire", "Citrus Di Gio", "Fruity Aventus", "Spicy Million", "Spicy Royalty", "Spicy XS"};
```

```
String MenEDT [] = {"Aromantic Adventurous", "Aromatic Eros", "Citrus Code", "Citrus  
Desire", "Citrus Di Gio", "Fruity Aventus", "Spicy Million", "Spicy Royalty", "Spicy XS"};
```

```
String Parfum [] = {"Intense", "Blast", "Julia", "Isabelle", "Elisa", "Roselle", "Layla"};
```

```
String ScarletEdition [] = {"Sakura", "Vaila", "Julia", "Rare"};
```

```
String FruitiesSeries [] = {"Mango Swirl", "Baby Dew", "Melon Moonlight", "Apple  
Smoothie", "Strawberry Crush"};
```

```
System.out.print("Enter the category that you want to see : ");
```

```
category = input.next();
```

```
input.nextLine();
```

```
System.out.println();
```

```
switch (category) {
```

```
    case "womenedp":
```

```
    case "WOMENEDP":
```

```
        System.out.println("WOMEN EDP | PRICE (RM 45.00)");
```

```
        System.out.println();
```

```
        for (i = 0; i < WomenEDP.length; i++) {
```

```
        System.out.println(WomenEDP[i]);
    }
    break;

    case "womenedt":
    case "WOMENEDT":
        System.out.println("WOMEN EDT | PRICE (RM 10.00)");
        System.out.println();
        for (i = 0; i < WomenEDT.length; i++) {
            System.out.println(WomenEDT[i]);
        }
        break;

    case "menedp":
    case "MENEDP":
        System.out.println("MEN EDP | PRICE (RM 45.00)");
        System.out.println();
        for (i = 0; i < MenEDP.length; i++) {
            System.out.println(MenEDP[i]);
        }
        break;

    case "menedt":
    case "MENEDT":
        System.out.println("MEN EDT | PRICE (RM 10.00)");
        System.out.println();
        for (i = 0; i < MenEDT.length; i++) {
            System.out.println(MenEDT[i]);
        }
        break;
```

```
case "parfum":  
case "PARFUM":  
System.out.println("PARFUM | PRICE (RM 49.00)");  
System.out.println();  
for (i = 0; i <Parfum.length; i++) {  
System.out.println(Parfum[i]);  
}  
break;
```

```
case "scarletedition":  
case "SCARLETEDITION":  
System.out.println("SCARLET EDITION | PRICE (RM 45.00)");  
System.out.println();  
for (i = 0; i <ScarletEdition.length; i++) {  
System.out.println(ScarletEdition[i]);  
}  
break;
```

```
case "fruitiesseries":  
case "FRUITIESSERIES":  
System.out.println("FRUITIES SERIES | PRICE (RM 29.00)");  
System.out.println();  
for (i = 0; i <FruitiesSeries.length; i++) {  
System.out.println(FruitiesSeries[i]);  
}  
break;  
}
```

```
System.out.println();
```

```
System.out.print("How many perfume that you want : ");
totalperfume = input.nextInt();
System.out.println();
```

```
if (totalperfume <= 1) {
    System.out.print("Choose your perfume : ");
    perfumeName = input.next();
    System.out.println();
```

```
    System.out.print("How many quantity that you want : ");
    quantity = input.nextInt();
    System.out.println();
```

```
    System.out.println("Add to cart : " +perfumeName);
    System.out.println();
```

```
    System.out.print("Enter the price :          RM ");
    price = input.nextDouble();
    System.out.println();
```

```
    totalprice = (price * quantity);
```

```
    calculate1 (price, quantity, totalprice);
```

```
    System.out.print("Pay the perfume :          RM ");
    pay = input.nextDouble();
```

```
    calculate2 (pay, totalprice, change);
    System.out.println();
```

```
showMessage2();  
}
```

```
else if (totalperfume > 1) {  
    do {  
        System.out.print("Choose your perfume : ");  
        perfumeName = input.next();  
        input.nextLine();  
        System.out.println();  
  
        System.out.print("How many quantity that you want for this perfume: ");  
        quantity = input.nextInt();  
        System.out.println();  
  
        System.out.println("Add to cart : " +perfumeName);  
        System.out.println();  
  
        System.out.print("Enter the price :           RM ");  
        price = input.nextDouble();  
  
        totalprice = (price * quantity);  
        totalprice += price;  
        count++;  
        System.out.println();  
  
        System.out.print("Do you want to choose another perfume? [Y/N] = ");  
        code = input.next().charAt(0);  
        System.out.println();
```



```

    }while (code == 'y' || code == 'Y');

    if (code == 'n' || code == 'N') {

        calculate1 (price, quantity, totalprice);

        System.out.println();

        System.out.print("Pay the perfume :           RM ");
        pay = input.nextDouble();

        calculate2 (pay, totalprice, change);
        System.out.println();

        showMessage2();
    }
}

```

```

public static void calculate1(double price, int quantity, double totalprice ) {
// TODO Auto-generated method stub

System.out.println("Total Price           RM " + totalprice);
System.out.println();

}

```

```

public static void calculate2(double pay, double totalprice, double change) {
// TODO Auto-generated method stub

```

```
change = (pay - totalprice);
```

```
System.out.println();
```

```
System.out.println("Your change          RM " + change);
```

```
}
```

```
public static void showMessage2() {
```

```
// TODO Auto-generated method stub
```

```
System.out.println("YOU HAVE MADE THE PAYMENT FOR THIS PERFUME. THANK  
YOU AND COME AGAIN");
```

```
}
```

```
}
```

11. Output

TotalPerfume <= 1

```
Log in
Enter your username : AZYYATI
Enter your password : 1235
-----
                        SUGARBOMB ONLINE SHOP
-----
                CATEGORY                ACCOUNT
-----
Which one do you want to see (enter 1 to see category) :

Here are all the category of perfume in our shop:

WOMEN EDP 30 ML
WOMEN EDT 10 ML
MEN EDP 30 ML
MEN EDT 10 ML
PARFUM
SCARLET EDITION
FRUITIES SERIES

Enter the category that you want to see : WOMENEDP

WOMEN EDP | PRICE (RM 45.00)

Floral Blush
Floral Immortal
Fruity Rose
Fruity Selena
Fruity Sparkle
Sweet Bombshell
Sweet Coach
Sweet Fantasy
Vanillavie
Vanilla Poison

How many perfume that you want : 1

Choose your perfume : VANILLAVIE

How many quantity that you want : 1

Add to cart : VANILLAVIE

Enter the price :                RM 45.00

Total Price                RM 45.0

Pay the perfume :                RM 50.00
|
Your change                RM 5.0

YOU HAVE MADE THE PAYMENT FOR THIS PERFUME. THANK YOU AND COME AGAIN
```

TotalPerfume > 1

```
PARFUM | PRICE (RM 49.00)

Intense
Blast
Julia
Isabelle
Elisa
Roselle
Layla

How many perfume that you want : 2

Choose your perfume : INTENSE

How many quantity that you want for this perfume: 1

Add to cart : INTENSE

Enter the price : RM 49.00

Do you want to choose another perfume? [Y/N] = Y

Choose your perfume : JULIA

How many quantity that you want for this perfume: 1

Add to cart : JULIA

Enter the price : RM 49.00

Do you want to choose another perfume? [Y/N] = N

Total Price RM 98.0

Pay the perfume : RM 100.00

Your change RM 2.0

YOU HAVE MADE THE PAYMENT FOR THIS PERFUME. THANK YOU AND COME AGAIN
```



UNIVERSITI UTARA MALAYSIA

FIRST SEMESTER SESSION 2021/2022 (A211)

STIA1113 PROGRAMMING 1

KUMPULAN C

GROUP ASSIGNMENT

ASSIGNMENT 3

TOPIC: BEAUTY

SUB TOPIC: SKIN CARE

LECTURER NAME:

PROF. MADYA DR. AZMAN B YASIN

PREPARED BY:

AINUL AMIRAH AFIQAH BINTI ABDUL TAIB

MATRIC NUMBER: 286535

1. IDENTIFY THE PROBLEM:

Skin care is a treatment that can be used by man or women started at the age of fifteen. Deciem's newest skin care brand, The Ordinary is a beauty product brand based in Canada. Deciem actually has a slew of other 'children' with a variety of targets and price ranges. The Ordinary, on the other side, piques the interest of beauty enthusiast particularly those who are 'crazy' for skin care product. This is due to the product high quality, which promises the users smooth and soft skin. The Ordinary also one of the skin care brands that used by many people and never disappoints the users. So the ordinary is quite familiar among the consumers that obsessed with skin care. the ordinary has launched a beauty product since 4 years ago. Although a price of this brand is a bit expensive compared to local product but effect given by this brand product is performed well and often gets praise from users. The ordinary know how to give the consumers what they want. The helpful and high performing formulas are why it has become most of people favourite.

2. UNDERSTAND THE PROBLEM

Some users want this brand to create a product for sensitive skin because some ingredients that mix in their serum, cannot be use and some said, they want the brand to increase the ingredient percentage in the product.

So, the product owner's need to produce products that can give a satisfaction to the users to always be the choice of consumers in the same time they can have a variety of product compared to other brand.

3. IDENTIFY ALTERNATIVE WAYS TO SOLVE THE PROBLEM:

- a) Use type of ingredient with different percentage (Niancinamide, Alpha Arbutin, Beta Acid, Hyaluronic Acid, Zinc and AHA) to determine the price.
- b) Use size of the serum's bottles to determine the price.
- c) Extra charge for adding more than 2 ingredients into the serum

4. SELECT THE BEST WAY TO SOLVE THE PROBLEM FROM THE LIST OF ALTERNATIVE SOLUTIONS:

To make it easier for customers to choose the content and ingredient in the skin care that is appropriate for their type. It can save their time because the customers can but it through online. The customers do not have to worry about the content in their serum because it is specially designed for their skin.

5. LIST INSTRUCTIONS THAT ENABLE YOU TO SOLVE THE PROBLEM USING THE SELECTED SOLUTION:

- i. The customers are welcomed by the system from The Ordinary Official Website
- ii. The customer has to key in their details such as name, email, address and phone number.
- iii. After key in detail, system will asked if the customers really want to order
- iv. The customers can Choose [N] if they didn't want to proceed order or [Y] if they proceed with their order.
- v. System will display the price-list of ingredient.
- vi. User choose either the size is [30] 30 ml bottle and [60] 60 ml bottle.
- vii. Costumers have to key in what ingredient they wanted to add into their serum
- viii. Costumers are given two ingredients that can be add into the serum.
- ix. Costumers have to key in the amount of the ingredient the wanted to add into their serum
- x. They system will ask if the customers want to add third ingredient. But they will be charge RM20 if they choose to put it into serum.
- xi. If customer proceed with third serum, they need to select their third serum and key in the amount
- xii. After done, the system will proceed to payment because customer cannot buy more than one item every purchase to experience the free shipping and The Ordinary will never pay for any refund if something happen to their order unless they buy 1 serum only.
- xiii. The system will ask the customers to enter their payment method
- xiv. After done purchasing, the receipt and the tracking number will be given via email.

6. CALCULATION TABLE

INGREDIENTS	AMOUNT	PRICE for 30ml (RM)	PRICE for 60ml (RM)
Niancinamide 10%	1	30	45
Zinc 1%	1	25	40
Alpha Arbutin 2%	1	45	60
Beta Hydroxy Acid 2%	1	35	60
Hyalucronic Acid 2%	1	30	45
Alpha Hydroxy Acid 30%	1	35	60

Ingredients	Amount	Bottle	Formula	Total
2 ingredient : Niancinamide 10% + Zinc1%	2 + 1	30ml	(Niancinamide 10% price * 2) + (Zinc 1% price) (RM30* 2) +(RM25) RM60 + RM25	RM85
3 ingredient : Alpha Arbutin 2% + Hyalucronic Acid 2% + Alpha Hydroxy Acid 30%	2 + 1+2	60ml	(Alpha Arbutin 2% price * 2) + Hyalucronic Acid 2% price + (Alpha Hydroxy Acid 30% price *2) + extra charge (RM60* 2) + RM45 + (RM60*2) + RM20 RM 120 + RM 45 + RM120 + 20	RM305
TOTAL SPEND				RM390

7. EVALUATE THE SOLUTION:

Based on this solution, it is very effective because it gives consumers the opportunity to create their special Serum that suits their own skin. Apart from that, consumers can also enjoy the product that really suit their skin. The owners also can avoid huge losses as there is no wastage by creating a product that do not suit the consumer's skin.

8. ALGORITHM

- i. User inserts size for [30] 30 ml bottles, [60] 60ml bottles
- ii. User insert first ingredient
- iii. User insert first ingredient's amount.
- iv. User insert second ingredient
- v. User insert second ingredient' amount
- vi. Calculate total = (igr1*amnt1) + (ingr2*amnt2)
- vii. User insert third ingredient
- viii. User insert third ingredient' amount
- ix. Calculate total2 = (igr1*amnt1) + (ingr2*amnt2) + (ingr3*amnt3) +
price_charge

Output will display total payment for order without third ingredient (total) and
order with third ingredient (total2)
- x. User enter their payment method
- xi. Receipt print, and tracking number sends vial email.

9. PSEUDOCODE:

START

IMPORT scanner, array

OUTPUT "Name : "

OUTPUT "Email : "

OUTPUT "Phone Number: "

OUTPUT "Address: "

INPUT "Name "

INPUT "Email "

INPUT "Phone Number "

INPUT "Address "

OUTPUT "Would you like to see the pricelist? [y/n]."

INPUT N

OUTPUT "Ops! You have return to homepage! See u again NAME."

IF enter Y THEN

OUTPUT "Here is the pricelist! Happy shopping."

INPUT method pricelist1

OUTPUT "Choose your bottle size [30/60]"

IF enter other than those two size

OUTPUT "Sorry! The size choosen is unavailable, choose your size again."

IF enter 30 THEN

OUTPUT "Enter first ingredient."

INPUT Ingredient

OUTPUT "Enter quantity of first ingredient."

INPUT amount

OUTPUT "Enter second ingredient."

INPUT ingrdient

OUTPUT "Enter quantity of second ingredient."

INPUT amount

OUTPUT "Would you like to add third ingredient? [y/n]."

INPUT N

OUTPUT "This is your total price RMxXxX."

OUTPUT "Proceed to payment method."

OUTPUT "Continue to delivery"

ELSE IF INPUT Y

OUTPUT "Enter third ingredient."

INPUT Ingredient

OUTPUT "Enter quantity of third ingredient."

INPUT amount

DECLARE pricee [30,35,25,45,40,60] : Array of double

OUTPUT "This is your total price RMxXxX."

OUTPUT total array

OUTPUT "Proceed to payment method."

INPUT method fees

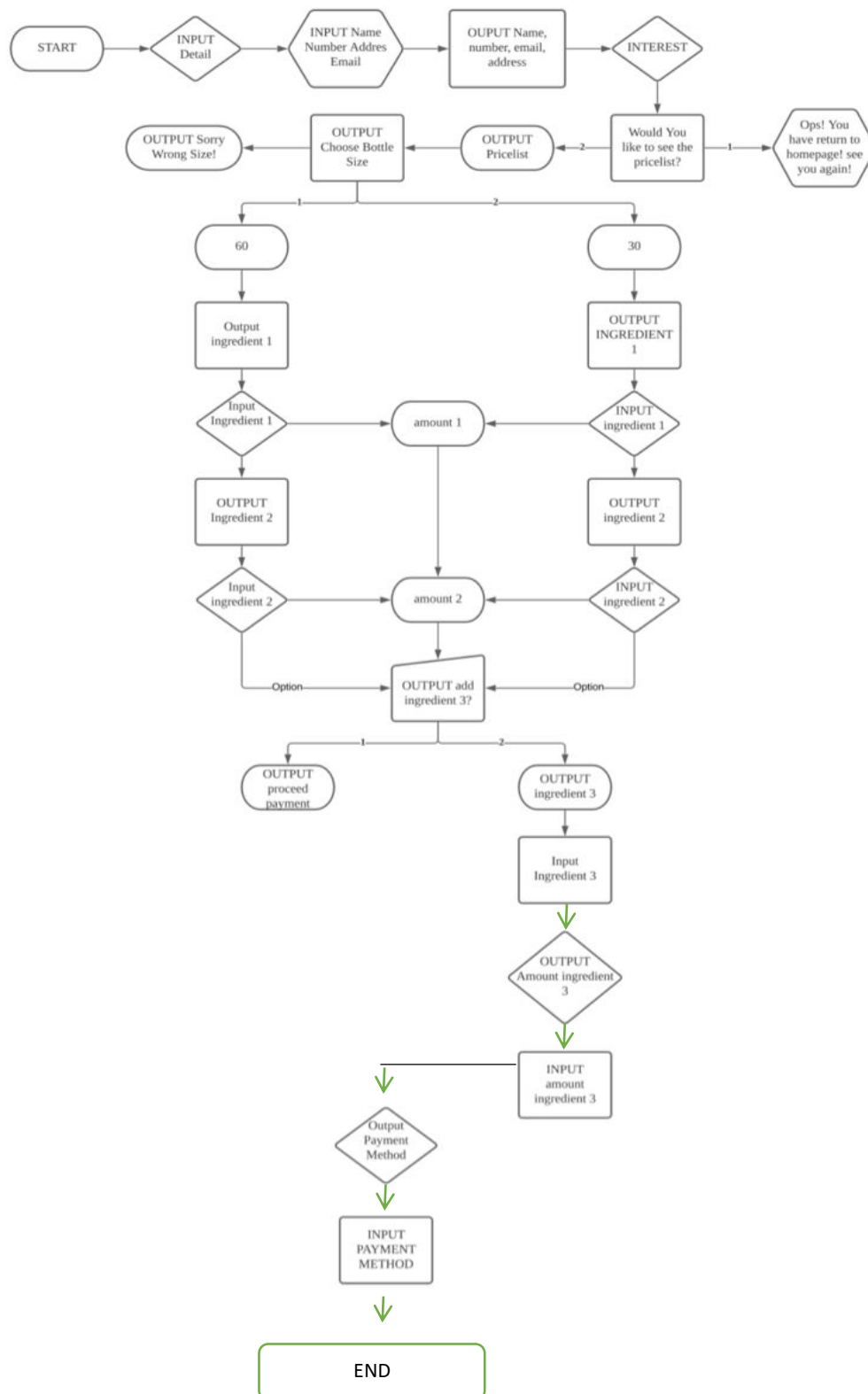
INPUT pay

OUTPUT "Continue to delivery"

OUTPUT "Thanks for your support!"

END

10. FLOWCHART



11. CODING

```
package Assignment3;
import java.util.Scanner;
public class test2 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner (System.in);
        double price_charge = 20;
        double amount, a2, a3, a4, a5, a6, a7, a8;
        double price, p1, p2, p3, p4, p5, p6, p7, p8;
        double finalprice, finalprice2;
        double total, t1, t2, t3, t4, t5, t6, t7, t8;
        double size1, size2, size3, size4;
        char pricelist, ans;
        double pricee [] = {30,25,35,45,40,60};

        System.out.println("\n_____Welcome to The Ordinary
        website, Your House of beauty!_____");
        System.out.println();

        System.out.println("_____CUSTOMERS
        DETAILS_____");
        System.out.println("-----");
        System.out.println();
        System.out.print("_____Enter your name : ");
        String name = sc.nextLine();
        System.out.print("_____Enter your email : ");
        String email = sc.nextLine();
        System.out.print("_____Enter your phone number : 
        ");
        String number = sc.nextLine();
        System.out.print("_____Enter your address : ");
        String address = sc.nextLine();
        System.out.println();

        System.out.println("*****
        *****");
        System.out.println("*_____Welcome to The Ordinary House of Beauty, " +
        name + "!*");
        System.out.println("*_____");
        System.out.println("*");
        System.out.println("*Dear " + name + ", Before you proceed,
        *");
        System.out.println("*We would like to inform that
        *");
        System.out.println("*You can't buy more than 1 serum to experience free shipping!
        *");
        System.out.println("*And you can add only two ingredient into your Serum.
        *");
        System.out.println("*You will be charge RM20 if you add more than two ingredients
        into you Serum *");
        System.out.println("*****
        *****");
    }
}
```

```

System.out.println();
System.out.print("Would You like to see the pricelist? [Y/N] : ");
System.out.println();
pricelist= sc.next().charAt(0);

switch (pricelist) {
case 'N' :
case 'n' :
    System.out.println("\nOppss! You have cancel your order and return to
homepage!");
    System.out.println("\nSee You next time," + name + "!"); break;

case 'Y' :
case 'y' :

    System.out.println("\nWhat a great Choice! Here is the ingredient!");
    System.out.println();

    priceList();

System.out.println("\nHere is the ingredients that you can add into your Serum ");
System.out.println("\nHappy Shopping!");
System.out.println();

System.out.println("\nNow please select your order size " + name );
System.out.println("\nYou can choose between 30ml or 60ml");
System.out.print("\nSize : ");
System.out.println();
size1 = sc.nextDouble();

while (size1 != 30 && size1 != 60) {
    System.out.println("Sorry! The chosen size is unavailable");
    System.out.print("Please select your order size : ");
    size1 = sc.nextDouble();
}

if(size1 == 30) {
    System.out.println("\nGreat! You can choose 30ml as your size of Serum's
bottle");
    System.out.println("\nNow choose your ingredient");
    System.out.println();
    System.out.print("\nEnter first ingredient : ");
    String ingredient1 = sc.next();
    System.out.print("\nEnter the quantity of " + ingredient1 + " : " );
    amount = sc.nextDouble();
    total = (amount*pricee[0]);

    System.out.print("\nEnter second ingredient : ");
    String ingredient2 = sc.next();
    System.out.print("\nEnter the quantity of " + ingredient2 + " : " );
    a2 = sc.nextDouble();
    t1 = (a2*pricee[1]);

    System.out.print("\nDo you want to add third ingredient? [Y/N]: ");
    ans = sc.next().charAt(0);
    switch (ans) {
    case 'Y' :

```

```

    case 'y' :
        System.out.printf("\nEnter third ingredient : ");
        String ingredient3 = sc.next();
        System.out.print("\nEnter the quantity of " + ingredient3 + " : " );
        a3 = sc.nextDouble();
        t3 = (a3*pricee[2]);
        System.out.println();

        System.out.println("_____");
        System.out.println();
        System.out.print("_____Your price for your
Custom Serum is RM" + (total + t1 + t3 + price_charge));
        System.out.println();

        System.out.println("_____");
        System.out.println();
        System.out.println();
        System.out.print("\nYou cant buy more than 1 serum, Continue with
your payment. ");
        System.out.print("\nEnter your payment Method : ");
        String payment = sc.next();
        System.out.println("\nDelivery : Free Delivery ");
        System.out.println();
        System.out.println();

        greetings();
        break;

    case 'N' :
    case 'n' :

System.out.println("_____");
        System.out.println();
        System.out.print("_____Your price for your Custom
Serum is RM" + (total + t1 ));
        System.out.println();

        System.out.println("_____");
        System.out.println();
        System.out.println();
        System.out.print("\nYou cant buy more than 1 serum, Continue with
your payment. ");
        System.out.print("\nEnter your payment Method : ");
        String payment2 = sc.next();
        System.out.println("\nDelivery : Free Delivery ");
        System.out.println();
        System.out.println();

        greetings();
        break;
}
}

else if (size1 ==60) {

```



```

        System.out.println("\nGreat! You can choose 60ml as your size of
Serum's bottle");
        System.out.println("\nNow choose your ingredient");
        System.out.print("\nEnter first ingredient : ");
        String ingredient4 = sc.next();
        System.out.print("\nEnter the quantity of " + ingredient4 + " : " );
        a4 = sc.nextDouble();
        t4 = (a4*pricee[5]);

        System.out.print("\nEnter second ingredient : ");
        String ingredient5 = sc.next();
        System.out.print("\nEnter the quantity of " + ingredient5 + " : " );
        a5 = sc.nextDouble();
        t5 = ((a5*pricee[5]));

        System.out.print("\nDo you want to add third ingredient? [Y/N]: ");
        ans = sc.next().charAt(0);
        switch (ans) {
            case 'Y' :
            case 'y' :
                System.out.printf("\nEnter third ingredient : ");
                String ingredient6 = sc.next();
                System.out.print("\nEnter the quantity of " + ingredient6 + " :
" );
                a6 = sc.nextDouble();
                t6 = ((a6*pricee[3]));
                System.out.println();

                System.out.println("_____");
                System.out.println();
                System.out.print("Custom Serum is RM" + (t4 + t5 + t6 + price_charge ));
                System.out.println();

                System.out.println("_____");
                System.out.println();
                System.out.println();
                System.out.print("\nYou cant buy more than 1 serum, Continue
with your payment. ");
                System.out.print("\nEnter your payment Method : ");
                String payment = sc.next();
                System.out.println("\nDelivery : Free Delivery ");
                System.out.println();
                System.out.println();

                greetings();

                break;

            case 'N' :
            case 'n' :

                System.out.println("_____");
                System.out.println();
                System.out.print("Custom Serum is RM" + (t4 + t5));
                System.out.println();
                System.out.print("Your price for your

```

```

        System.out.println();

        System.out.println("_____");
        System.out.println();
        System.out.println();
        System.out.print("\nYou cant buy more than 1 serum, Continue
with your payment. ");
        System.out.print("\nEnter your payment Method : ");
        String payment1 = sc.next();
        System.out.println("\nDelivery : Free Delivery ");
        System.out.println();
        System.out.println();

        greetings();

        break;
    }
}
}

public static void greetings() {
    System.out.println("
*****
**");
    System.out.println("      *
**");
    System.out.println("      *                      Thank You for purchasing
from us!                      *");
    System.out.println("      *          We will send the receipt and the
tracking number via email!    *");
    System.out.println("      *          You will get your order after
14days of working            *");
    System.out.println("      *
**");
    System.out.println("
*****
**");
}

public static void priceList() {
    System.out.println("\n                      Price-List for 30ml Serum :");
    System.out.println();
    System.out.println("
*****
**");
    System.out.println("      *
**");
    System.out.println("      *          INGREDIENTS          QUANTITY
PRICE      *");
    System.out.println("
**");
    System.out.println("_____");
    System.out.println("      *
**");

```

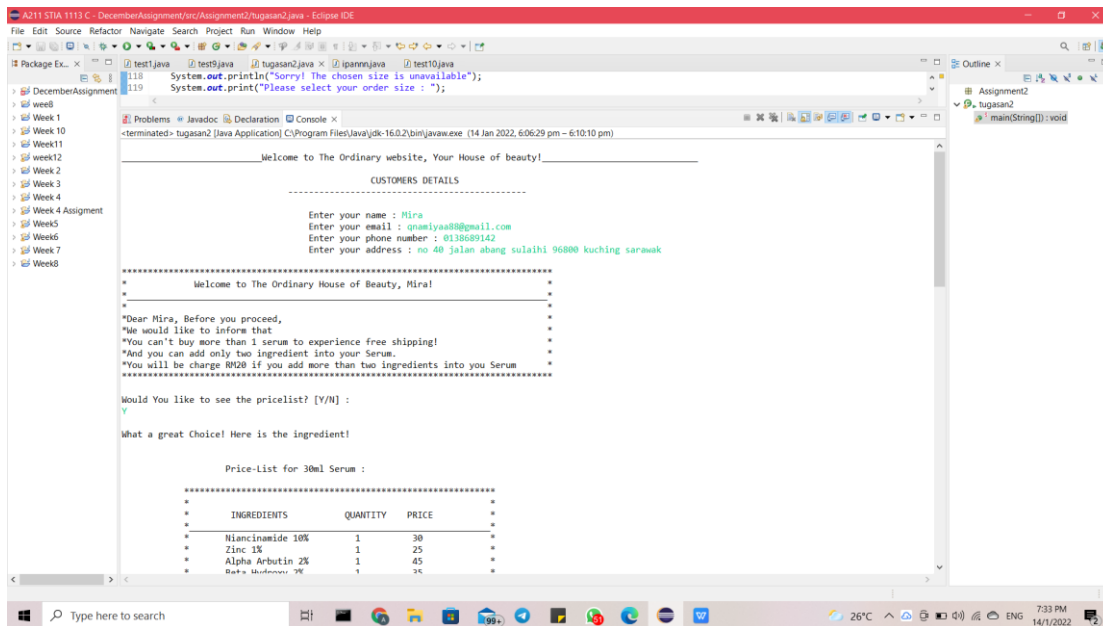
```

        System.out.println("                *                Niancinamide 10%                1
30                *");
        System.out.println("                *                Zinc 1%                1
25                *");
        System.out.println("                *                Alpha Arbutin 2%                1
45                *");
        System.out.println("                *                Beta Hydroxy 2%                1
35                *");
        System.out.println("                *                Hyalucronic Acid 2%                1
30                *");
        System.out.println("                *                Alpha Hydroxy Acid 30%                1
35                *");
        System.out.println("                *");
    *");
        System.out.println("
*****");
        System.out.println();
        System.out.println();
        System.out.println("\n                                Price-List for 60ml
Serum :");
        System.out.println();
        System.out.println("
*****");
        System.out.println("                *");
    *");
        System.out.println("                *                INGREDIENTS                QUANTITY
PRICE                *");
        System.out.println("
*                *");
        System.out.println("                *");
    *");
        System.out.println("                *                Niancinamide 14%                1
45                *");
        System.out.println("                *                Zinc 5%                1
40                *");
        System.out.println("                *                Alpha Arbutin 6%                1
60                *");
        System.out.println("                *                Beta Hydroxy 6%                1
60                *");
        System.out.println("                *                Hyalucronic Acid 6%                1
45                *");
        System.out.println("                *                Alpha Hydroxy Acid 34%                1
60                *");
        System.out.println("                *");
    *");
        System.out.println("
*****");
        System.out.println();
    }
}

```

12. OUTPUT

If 60ml/30ml serum (with third ingredient)



```
System.out.println("Sorry! The chosen size is unavailable");
System.out.print("Please select your order size : ");
```

Welcome to The Ordinary website, Your House of beauty!

CUSTOMERS DETAILS

Enter your name : Mira
Enter your email : qnamiya88@gmail.com
Enter your phone number : 0138689142
Enter your address : no 40 jalan abang sulaihl 96800 kuching sarawak

Welcome to The Ordinary House of Beauty, Mira!

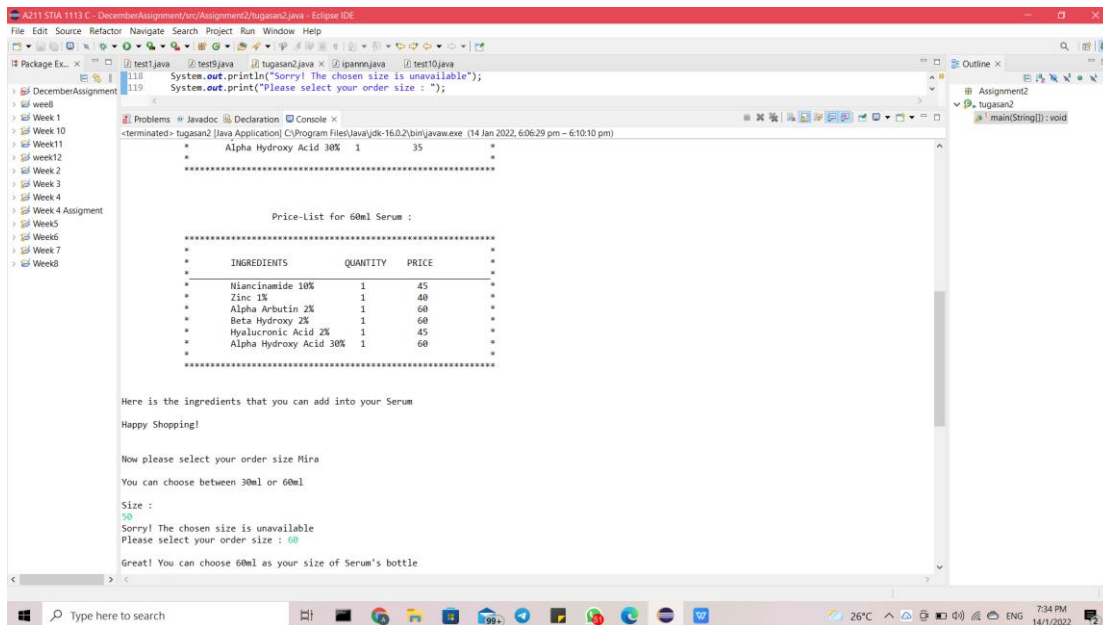
*Dear Mira, Before you proceed,
*We would like to inform that
*You can't buy more than 1 serum to experience free shipping!
*And you can add only two ingredient into your Serum.
*You will be charge RM20 if you add more than two ingredients into your Serum

Would You like to see the pricelist? [Y/N] :
Y

What a great Choice! Here is the ingredient!

Price-List for 30ml Serum :

INGREDIENTS	QUANTITY	PRICE
Niacinamide 10%	1	30
Zinc 1%	1	25
Alpha Arbutin 2%	1	45
Beta Hydroxy 2%	1	25



```
System.out.println("Sorry! The chosen size is unavailable");
System.out.print("Please select your order size : ");
```

Price-List for 60ml Serum :

INGREDIENTS	QUANTITY	PRICE
Niacinamide 10%	1	45
Zinc 1%	1	40
Alpha Arbutin 2%	1	60
Beta Hydroxy 2%	1	60
Hyaluronic Acid 2%	1	45
Alpha Hydroxy Acid 30%	1	60

Here is the ingredients that you can add into your Serum
Happy Shopping!

Now please select your order size Mira
You can choose between 30ml or 60ml
Size :
50
Sorry! The chosen size is unavailable
Please select your order size : 60
Great! You can choose 60ml as your size of Serum's bottle

```
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer: test1.java, test9.java, tugas2.java, ipanm.java, test10.java
DecemberAssignment
Week1
Week10
Week11
Week12
Week2
Week3
Week4
Week4 Assignment
Week5
Week6
Week7
Week8
Problems: Javadoc Declaration Console
-terminated- tugas2 [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.exe (14 Jan 2022, 6:06:29 pm - 6:10:10 pm)
Now choose your ingredient
Enter first ingredient : Arbutin
Enter the quantity of Arbutin : 3
Enter second ingredient : Beta
Enter the quantity of Beta : 2
Do you want to add third ingredient? [Y/N]: Y
Enter third ingredient : hyalucronic
Enter the quantity of hyalucronic : 3

Your price for your Custom Serum is RM455.0

You cant buy more than 1 serum, Continue with your payment.
Enter your payment Method : Online Transfer
Delivery : Free Delivery

*****
*                               *
*      Thank You for purchasing from us!      *
*      We will send the receipt and the tracking number via email!      *
*      You will get your order after 14days of working      *
*                               *
*****
```

If 60/30ml serum without third ingredient :

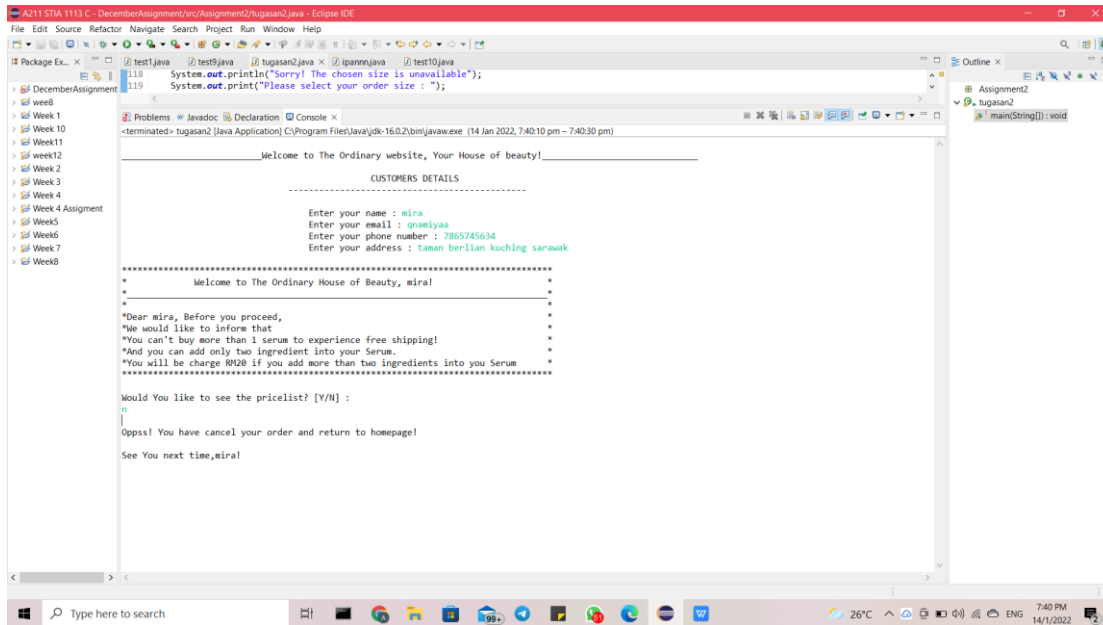
```
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer: test1.java, test9.java, tugas2.java, ipanm.java, test10.java
DecemberAssignment
Week1
Week10
Week11
Week12
Week2
Week3
Week4
Week4 Assignment
Week5
Week6
Week7
Week8
Problems: Javadoc Declaration Console
-terminated- tugas2 [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.exe (14 Jan 2022, 7:39:05 pm - 7:39:36 pm)
Please select your order size : 30
Great! You can choose 30ml as your size of Serum's bottle
Now choose your ingredient
Enter first ingredient : niancin
Enter the quantity of niancin : 3
Enter second ingredient : zinc
Enter the quantity of zinc : 4
Do you want to add third ingredient? [Y/N]: N

Your price for your Custom Serum is RM190.0

You cant buy more than 1 serum, Continue with your payment.
Enter your payment Method : maybank
Delivery : Free Delivery

*****
*                               *
*      Thank You for purchasing from us!      *
*      We will send the receipt and the tracking number via email!      *
*      You will get your order after 14days of working      *
*                               *
*****
```

If cancel order :



```

A211 STA 1113 C - DecemberAssignment2\src\Assignment2\tugasan2.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer: test1.java test9.java tugas2.java ipanne.java test10.java
DecemberAssignment2 > week > Week 1 > Week 10 > Week 11 > week12 > Week 2 > Week 3 > Week 4 > Week 4 Assignment > Week 5 > Week 6 > Week 7 > Week 8
Problems Javadoc Declaration Console
<terminated> tugas2 [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.exe (14 Jan 2022, 7:40:10 pm - 7:40:30 pm)
Welcome to The Ordinary website, Your House of beauty!
CUSTOMERS DETAILS
Enter your name : mira
Enter your email : qnawlyaa
Enter your phone number : 7965745634
Enter your address : taman berlian kuching sarawak
*****
Welcome to The Ordinary House of Beauty, mira!
*****
*
*Dear mira, Before you proceed,
*We would like to inform that
*You can't buy more than 1 serum to experience free shipping!
*And you can add only two ingredient into your Serum.
*You will be charge RM20 if you add more than two ingredients into you Serum
*****
Would You like to see the pricelist? [Y/N] :
n
Oppss! You have cancel your order and return to homepage!
See You next time,mira!
Outline: Assignment2 > tugas2 > main(String[]):void
```



UNIVERSITI UTARA MALAYSIA

FIRST SEMESTER SESSION 2021/2022 (A211)

STIA1113 PROGRAMMING 1

KUMPULAN C

GROUP ASSIGNMENT

ASSIGNMENT 3

TOPIC: BEAUTY

SUB TOPIC: HAIR

LECTURER NAME:

PROF. MADYA DR. AZMAN B YASIN

PREPARED BY:

CHOONG QIAN YU

MATRIC NUMBER: 286623

Problem:

The National Cancer Society Malaysia (NCSM) had organized a campaign to raise public awareness on the prevention, screening and early detection of cancer through education and raising funds for the patients. MINI salon planned to organize an event to support this campaign.

Alternative:

1. Help to distribute the brochure of NCSM to the public and their customer.
2. Held an event to give financial support to this campaign.
3. Held an event to encourage the public to donate their hair by supporting the campaign.

Best way:

-The first alternative is good, but not suggested because many people will not read through the brochure in detail and end up just recycling the brochure. In the end, that's not much helping to support this campaign and help the patients.

-The second alternative is good and suggested because some patients had spent all of their savings to have chemotherapy and buy medicines, which is very expensive to cure their cancer. High expenses make it difficult for them to cope with daily expenses.

-The third alternative is good and also suggested because the patients that experienced chemotherapy may have a drastic hair loss due to the chemical reaction in their body to fight with the cancer cells. The hair donated by the public can be made as a wig and used by the patients.

Instruction:

1. The program started with the introduction of the campaign and the event which is organized by NCSM and MINI salon and welcome the public to participate.
2. The public will be asked whether are they interested to participate in this event. If they are interested, they have to enter 1, or else, they have to enter 2 to end this program.
3. If the public is interested to join this event, the program will require the participants to fill in their details such as:
 - i. Name
 - ii. NRIC
 - iii. Contact number

- iv. Age
 - v. Gender
4. The program will then print out the participant's details and also the fee that needs to be paid by the participants according to their category which is
 - i. Female: RM10
 - ii. Male: RM7
 - iii. Kids: RM5
 5. The program then continues to the payment section where the participants have to choose their preferred payment method either by cash or online transfer.
 6. If they choose cash, they have to move to the cashier counter to complete the payment whereas if they choose online transfer, the details of receiving bank will be shown.
 7. The participant will then be allocated to the seat available in the event. They are required to have waited if all the seats are full.
 8. When the program proceeds to the calculation section, the program will print out the number of participants who participated in this event and also all the fees collected. Not forgetting the extra donations from the event organizer, MINI salon.
 9. The organizer will also have to enter the total fees received from both cash and online transfer.
 10. In the last part, the program will show the largest amount and the smallest amount of fees collected from the three categories.

Calculation:

Number of female donors	A
Fees collected (A1)	$A \times RM10$

Number of male donors	B
Fees collected (B1)	$B \times RM7$

Number of kids donors	C
Fees collected (C1)	$C \times RM5$

Donations from MINI salon (D1)	$(A + B + C) \times RM5$
Total donations	$A1 + B1 + C1 + D1$

Total collected fees via cash	E
Total collected fees via online transfer	F

Pseudocode

START

IMPORT scanner, array

OUTPUT "If you are interested to join, please enter 1."

OUTPUT "If you are not interested, please enter 2."

OUTPUT "Are you interested to join?"

INPUT method interest

INPUT join

IF enter 1 THEN

INPUT method inputDetails

INPUT name, ic, num, age, gender

OUTPUT name, ic, num, age, gender

ELSE

OUTPUT "Thanks for your concern, hope to see you again

next time!"

ENDIF

INPUT method fees

IF gender equals female THEN

IF age less than or equals to 12 years old THEN

```

        OUTPUT "Hi, name. Your fee is RM 5."
    ELSE
        OUTPUT "Hi, name. Your fee is RM 10."
    ENDIF

ELSE
    IF age less than or equals to 12 years old THEN
        OUTPUT "Hi, name. Your fee is RM 5."
    ELSE
        OUTPUT "Hi, name. Your fee is RM 7."
    ENDIF
ENDIF

INPUT method payment
    INPUT pay
        IF pay equals 1 THEN
            OUTPUT "You have selected the cash payment method!"
            OUTPUT "Please move to the cashier counter that is beside the
entrance to complete your payment."
            OUTPUT "Thanks for your support!"
        ELSE
            OUTPUT "You have selected the online transfer payment
method!"

            OUTPUT "The details of the receiver bank account are as
below:"

            OUTPUT "Maybank"
            OUTPUT "MINI salon"
            OUTPUT "173678460739"
            OUTPUT "Please type on the reference with "Hair Donation""
            OUTPUT "Thanks for your support!"

        ENDIF
    INPUT method seatAllocation
        FOR i = 8 to i>=0
            IF i<=8 and i>0 THEN

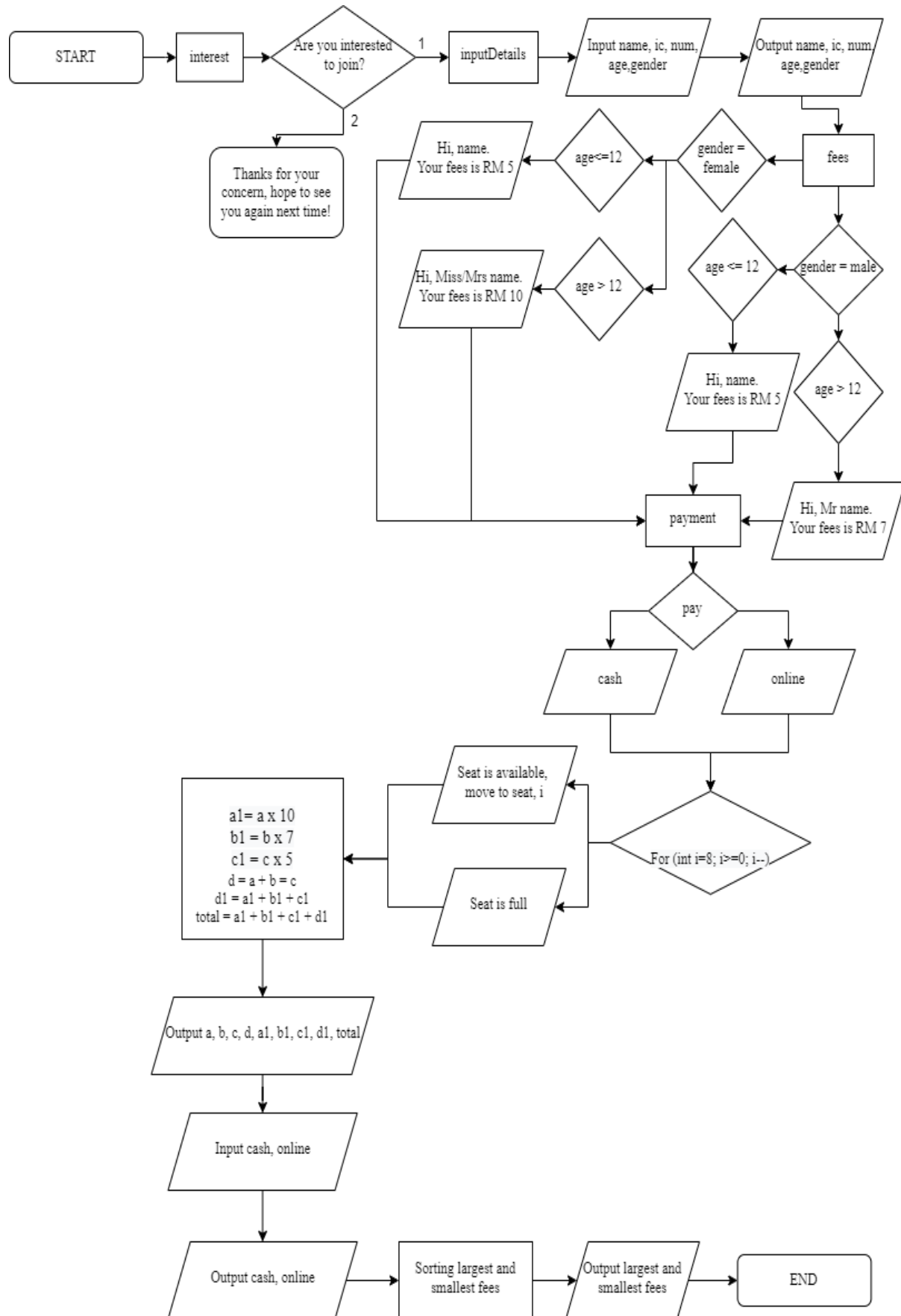
```

```

        OUTPUT "Your seat is available!"
        OUTPUT "Please move to seat, i"
    ELSE
        OUTPUT "Sorry to inform you that the seats are
currently full, please be patient and wait for a while"
        OUTPUT "Thanks for your understanding and sorry for
the inconvenience caused!"
    END FOR
INPUT method calculation
    DECLARE a, b and c
    DECLARE a1 = a x 10
        b1 = b x 7
        c1 = c x 5
        d = a + b + c
        d1 = a1 + b1 + c1 + d1
        sum = a1 + b1 + c1 + d1
    DECLARE cash, online
    OUTPUT a, b, c, d
    DECLARE feesCollected [a1, b1, c1] : Array of double
    DECLARE category ["Female", "Male", "Kids"] : Array of String
    OUTPUT "The amount of fees collected from each category : "
    OUTPUT array category and feesCollected
    OUTPUT d1, sum
    INPUT cash, online
    OUTPUT cash, online
    OUTPUT largest amount of fees collected
    OUTPUT smallest amount of fees collected
END

```

FLOW CHART



Coding:

```
package assignment3;

import java.util.Arrays;
import java.util.Scanner;

public class Assignment3 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        System.out.println("National Cancer Society Malaysia (NCSM) had organized a campaign recently");
        System.out.println("");

        System.out.println("This campaign is to raise public awareness on the prevention, screening and early detection of cancer through education and raising funds for the patients.");

        System.out.println("MINI salon had organized this hair donation event to support the campaign organized by NCSM and to help patients that are suffering from cancer!");
        System.out.println("");

        System.out.println("The public is welcome to take part in this event to show us your support!");
        System.out.println("");

        System.out.println("~~~~~");
        System.out.println("~~~~~");
        System.out.println("~~~~~");

        interest(0);

        payment();

        seatAllocation();

        calculation(37,25,11);

    }

    public static void interest(int join) {
        Scanner sc=new Scanner(System.in);
        System.out.println("If you are interested to join our event, please enter 1" );
        System.out.println("If you are not interested, please enter 2.");
        System.out.println("Are you interested to join?");
        join = sc.nextInt();

        if(join == 1) {
            inputDetails();
        }
        else {
            System.out.println("Thanks for your concern, hope to see you again next time!");
        }
    }
}
```

```

    }

    public static void inputDetails() {
        Scanner sc=new Scanner(System.in);
        System.out.println("");
        System.out.println("Thanks for your participation!");
        System.out.println("");
        System.out.println("You have to fill in your details for the
registration purpose in this event.");
        System.out.println("");

        System.out.println("1. Please enter your name: ");
        String name = sc.nextLine();

        System.out.println("2. Please enter your NRIC: ");
        String ic = sc.next();

        System.out.println("3. Please enter your contact number: ");
        String num = sc.next();

        System.out.println("4. Please enter your age: ");
        int age = sc.nextInt();

        System.out.println("5. Please enter your gender: ");
        String gender = sc.next();

        System.out.println("=====");
        System.out.println("=====PERSONAL
DETAILS=====");

        System.out.println("=====");
        System.out.println("Name          : "+ name);
        System.out.println("NRIC          : "+ ic);
        System.out.println("Contact number : "+ num);
        System.out.println("Age           : "+ age);
        System.out.println("Gender        : "+ gender);

        System.out.println("=====");

        System.out.println("=====");

        fees(age,gender,name);
    }

    public static void fees(int age, String gender, String name) {
        System.out.println("");
        System.out.println("For your information, ");
        System.out.println("We will collect an amount of fees from participant
according to their category in order to raise fund for the patient in need.");
        System.out.println("For each participant, the event organizer, MINI
salon will donate extra RM 5 to NCSM to support their campaign.");
        System.out.println("");
    }

```

```

        if(gender.equals("female"))
        {
            if (age <= 12)
            {
                System.out.println("Hi, " + name + ". Your fees is RM
5.");
            }
            else
            {
                System.out.println("Hi, Miss/Mrs " + name + ". Your
fees is RM 10.");
            }
        }
        else
        {
            if (age <= 12)
            {
                System.out.println("Hi, " + name + ". Your fees is RM
5.");
            }
            else
            {
                System.out.println("Hi, Mr " + name + ". Your fees is
RM 10.");
            }
        }
    }

    public static void payment() {
        Scanner sc =new Scanner(System.in);

        System.out.println("Please select your payment method: ");
        System.out.println("1 - cash payment ");
        System.out.println("2 - online transfer payment");
        int pay = sc.nextInt();

        if(pay == 1)
        {
            System.out.println("You have selected the cash payment
method!");
            System.out.println("Please move to the cashier counter that is
beside the entrance to complete your payment.");
            System.out.println("Thanks for your support!");
        }
        else
        {
            System.out.println("You have select the online transfer
payment method!");
            System.out.println("");
            System.out.println("The details of the receiver bank account
are as below: ");
            System.out.println("");
            System.out.println("Maybank
");
            System.out.println("MINI salon
");
            System.out.println("173678460739
");
        }
    }
}

```



```

        System.out.println(" Please type on the reference with \"Hair
Donation\" ");
        System.out.println("");
        System.out.println("Thanks for your support!");
    }

}

    public static void seatAllocation() {
        System.out.println("");

        System.out.println("*****
*****
*****");

        System.out.println("*****
*****SEAT
ALLOCATION*****");

        System.out.println("*****
*****
*****");

        for(int i=8; i>=0; i--)
        {

            if(i<=8 && i>0) {
                System.out.println("Your seat is available!");
                System.out.println("Please move to seat "+i);
                System.out.println("");
            }
            else
                System.out.println("Sorry to inform you that the seats
are currently full, please be patient and wait for a while!"+ "\nThanks for your
understanding and sorry for the inconvenience caused!");

        }

    }

    public static void calculation(int a, int b, int c)
{ //a=female,b=male,c=kids
    Scanner sc=new Scanner (System.in);
    double a1 = a * 10;
    double b1 = b * 7;
    double c1 = c * 5;
    int d = a + b + c;
    double d1 = d * 5;
    double total = a1+ b1 + c1 + d1;
    double cash,online;
    System.out.println("");

    System.out.println("*****
*****
*****");

    System.out.println("*****
*****CALCULATION*****
*****");
}

```

```

        System.out.println("*****
*****
*****");
        System.out.println("The number of participant are: ");
        System.out.println("Female participants - " + a);
        System.out.println("Male participants - " + b);
        System.out.println("Kids participants - " + c);
        System.out.println("-----
");
        System.out.println("Total : " + d + " participants");
        System.out.println("");

        double[] feesCollected = new double[] {a1,b1,c1};
        String[] category = new String[] {"Female","Male","Kids"};

        System.out.println("The amount of fees collected from each
category : ");
        for(int i=0; i<feesCollected.length; i++) {
            System.out.println(category[i] + " : "+"RM " +
feesCollected[i]);
        }

        System.out.println("");
        System.out.println("The extra donations from MINI salon is RM " +
d1);
        System.out.println("In total, the fees that pass to NCSM is RM " +
total);
        System.out.println("");

        System.out.println("Please enter the amount of cash payment
received: ");
        cash = sc.nextDouble();
        System.out.println("Please enter the amount of online payment
received: ");
        online = sc.nextDouble();

        System.out.println("From the total amount of fees collected, ");
        System.out.println("the cash payment collected is RM " + cash);
        System.out.println("while the online payment collected is RM " +
online);
        System.out.println("");

        Arrays.sort(feesCollected);
        System.out.println("The largest amount of fees collected is : ");
        System.out.println("Female participants = RM "
+feesCollected[feesCollected.length-1]);

        System.out.println("The smallest amount of fees collected is : ");
        System.out.println("Kids participants = RM" +feesCollected[0]);

        System.out.println("");

        System.out.println("*****
*****
*****");

        System.out.println("*****

```

```
*****END*****  
*****");  
  
    System.out.println("*****  
*****  
*****");  
  
    }  
  
}
```

Output:

National Cancer Society Malaysia (NCSM) had organized a campaign recently

This campaign is to raise public awareness on the prevention, screening and early detection of cancer through education and raising funds for the patients. MINI salon had organized this hair donation event to support the campaign organized by NCSM and to help patients that are suffering from cancer!

The public is welcome to take part in this event to show us your support!

~~~~~  
~~~~~  
If you are interested to join our event, please enter 1

If you are not interested, please enter 2.

Are you interested to join?

1

Thanks for your participation!

You have to fill in your details for the registration purpose in this event.

1. Please enter your name:

Jenny Cheah

2. Please enter your NRIC:

000422-08-0202

3. Please enter your contact number:

012-3456789

4. Please enter your age:

22

5. Please enter your gender:

female

=====
=====PERSONAL DETAILS=====
=====

Name : Jenny Cheah
NRIC : 000422-08-0202
Contact number : 012-3456789
Age : 22
Gender : female

=====
=====

For your information,

We will collect an amount of fees from participant according to their category in order to raise fund for the patient in need.

For each participant, the event organizer, MINI salon will donate extra RM 5 to NCSM to support their campaign.

Hi, Miss/Mrs Jenny Cheah. Your fee is RM 10.

Please select your payment method:

1 - cash payment

2 - online transfer payment

2

You have selected the online transfer payment method!

The details of the receiver bank account are as below:

Maybank

MINI salon
173678460739

Please type on the reference with "Hair Donation"

Thanks for your support!

*****SEAT
ALLOCATION*****

Your seat is available!
Please move to seat 8

Your seat is available!
Please move to seat 7

Your seat is available!
Please move to seat 6

Your seat is available!
Please move to seat 5

Your seat is available!
Please move to seat 4

Your seat is available!
Please move to seat 3

Your seat is available!
Please move to seat 2

Your seat is available!
Please move to seat 1

Sorry to inform you that the seats are currently full, please be patient and wait
for a while!
Thanks for your understanding and sorry for the inconvenience caused!

*****CALCULATION*****

The number of participant are:

Female participants - 37

Male participants - 25

Kids participants - 11

Total : 73 participants

The amount of fees collected from each category :

Female : RM 370.0

Male : RM 175.0

Kids : RM 55.0

The extra donations from MINI salon is RM 365.0

In total, the fees that pass to NCSM is RM 965.0

Please enter the amount of cash payment received:

371

Please enter the amount of online payment received:

594

From the total amount of fees collected,
the cash payment collected is RM 371.0
while the online payment collected is RM 594.0

The largest amount of fees collected is :

Female participants = RM 370.0

The smallest amount of fees collected is :

Kids participants = RM55.0

```
*****
*****
*****END*****
*****
*****
*****
```