UNIVERSITI UTARA MALAYSIA

FIRST SEMESTER SESSION 2021/2022 (A211)

STIA1113 PROGRAMMING 1

KUMPULAN C

GROUP PROJECT

TOPIC: BEAUTY

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1.0 BACKGROUND

Beauty Empire is a corporate group based in Kuala Lumpur, Malaysia which was founded by Mrs Alexandra in 2012. There are five subsidiaries under Beauty Empire which cover all the subsectors in the beauty industry.

The first subsidiary is Princess. Princess is a new cosmetic shop that sells a variety of beauty products needed by all age ranges of customers, such as toner, primer, lipstick, etc. This shop has become the first choice of Malaysian females whenever they want to buy cosmetics.

The second subsidiary is a jewellery shop where the shop name is "Gold Jewellery Shop". Gold Jewellery Shop is a jewellery shop that sells gold jewellery. In this shop, you can find various designs and types of gold jewellery. For example, necklaces, bracelets, earrings, rings and so on.

SugarBomb is the third subsidiary under Beauty Empire. This is one of the famous perfume shops among Malaysians. In this shop, you can find numerous types of perfume that fits your sense of smell, whether you want a stronger scent perfume (EDP) or lighter scent perfume (EDT), your sense will be satisfied.

The next one will be "The Ordinary", a skincare shop that lied under Beauty Empire. Skincare is a treatment needed by the man or woman after they reach puberty. The customers can personalize their products in The Ordinary with the ingredients they want that are suitable for their skin problems. The professional consultant in the shop is always ready to give improvement suggestions to the customers.

Last but not least, the MINI salon is a hair salon that also lied under Beauty Empire. The MINI salon is one of the famous salons as the professional stylists always give the best service to the customers. Not only that, but the MINI salon also sells its own hair products in the shop.

In conjunction with the tenth year anniversary of Beauty Empire, the management of Beauty Empire decided to hold an anniversary carnival for all the workers in Beauty Empire. The workers can browse through all the online shops of the subsidiaries of Beauty Empire to buy the products their need with some special promotions. Furthermore, the MINI salon under Beauty Empire is also organizing a hair donations event, the workers are encouraged to join as well as with their friends and relatives.

2.0 DESCRIPTION

1. First, after customers and workers open the Beauty Empire website, they will directly go to the main menu of the website.

2. In the main menu section, customers need to choose which category they want to go except Make Up category because it is just for staff only to check stock.

```
Welcome to "Beauty Empire" Company

MAIN MENU
Please choose a category that you need
[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*
[2] JEWELLERY (PURCHASE OF JEWELLERY)
[3] PERFUME (CATEGORY)
[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)
[5] HAIR (DONATION)
```

Main Menu

3. Customers and workers just need to select one number from the category to continue to use this website.

4. After customers and workers choose the category, they need to fill in their username and password to log in to their account.

```
Please log in your account.
Username: Jessica_
Password: 123456
Login successfully....
```

Account log in

5. In the category that customers choose they can follow the instructions on how to buy or do the donation and workers can check and update the quantity of product in stock.

6. Before or after customers follow all the instructions and fill in all the things they want to buy or donate from the category they choose, they also need to fill in their personal data for store data or shipping purposes.

```
*PLEASE ENTER YOUR DETAILS*
1. Please enter your name:
Jessica
2. Please enter your NRIC:
001006-01-1196
3. Please enter your email:
jessica@gmail.com
5. Please enter your contact number:
019-7543321
6. Please enter your address:
3 jln daya johor bharu
```

Data: Input

```
================================================================================
========================PERSONAL DETAILS========================================
================================================================================
Name           : Jessica
NRIC           : 001006-01-1196
Email          : jessica@gmail.com
Contact number : 019-7543321
Address        : 3 jln daya johor bharu
================================================================================
================================================================================
```

Data: Output

7. At the end of the website, if customers buy or donate from Beauty Empire the thank you note will come out. It will also be shown when workers quit the Make Up (Check Stock) section.

```
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

!!!!!!!Thank you for your visit!!!!!!!
```

8. But if customers cancel to buy or donate another thank you note also will be appeared.

```
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

!!!!!!!Thank you for your visit!!!!!!!
```
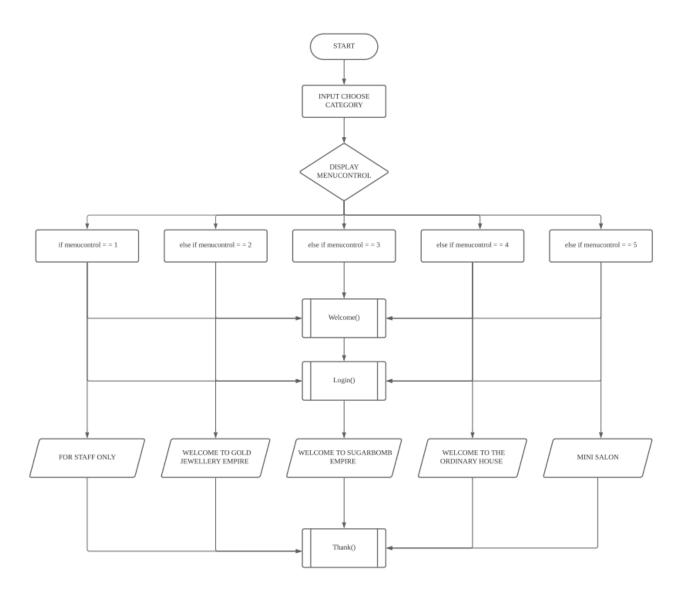
3.0 ALGORITHM

Pseudocode

Start

    Declare menucontrol
    Display main menu
    Scan menucontrol

    If (menucontrol == 1)
    Display make up page
    welcome()
    login()
    stockprocess(colors1, colors2)
    quit()

    Else if (menucontrol == 2)
    Display jewellery page
    welcome()
    login()
    showMessage()
    budget(item)

    Else if (menucontrol == 3)
    Display perfume page
    welcome()
    login()
    perfume()

    Else if (menucontrol == 4)
    Display skincare page
    welcome()
    login()
    skincare(pricee)

    Else if (menucontrol == 5)
    Display hair page
    welcome()
    login()
    interest(0)

    Else
    Display Not available. Please try again.

End

Flowchart

START

INPUT CHOOSE CATEGORY

DISPLAY MENUCONTROL

if menucontrol == 1   else if menucontrol == 2   else if menucontrol == 3   else if menucontrol == 4   else if menucontrol == 5

Welcome()

Login()

FOR STAFF ONLY   WELCOME TO GOLD JEWELLERY EMPIRE   WELCOME TO SUGARBOMB EMPIRE   WELCOME TO THE ORDINARY HOUSE   MINI SALON

Thank()

4.0 CODING

File Edit Source Refactor Navigate Search Project Run Window Help

AssignmentCo... WelcomeToUU... MyName.java Assignment1A... Switch2.java Count.java ThreeTimesPa... RelationalLo... RelationalLo... RelationalLo... Mark.java GroupProjec...

```java
1   package groupProject;
2   import java.util.Scanner;
4   public class GroupProject {
5
6       public static void main(String[] args) {
7           // TODO Auto-generated method stub
8
9           int menucontrol;
10          Scanner scan = new Scanner (System.in);
11          System.out.println("Welcome to \"Beauty Empire\" Company");
12          System.out.println("\nMAIN MENU");
13          System.out.println("Please choose a category that you need");
14          System.out.println("[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*");
15          System.out.println("[2] JEWELLERY (PURCHASE OF JEWELLERY) ");
16          System.out.println("[3] PERFUME (CATEGORY)");
17          System.out.println("[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)");
18          System.out.println("[5] HAIR (DONATION)");
19          menucontrol = scan.nextInt();
20
21          if (menucontrol == 1) {
22              welcome();
23              System.out.println("\n*FOR STAFF ONLY*");
24              Login();
25              int control = 0;
26              String [] colors1 = {"Neon Red", "Brick Red", "Toasted Almond", "Sweet Marsala", "Preppy Red"}; //LIPSTICK
27              String [] colors2 = {"Grayness Reducer - Brown", "Fresh Brightner - Pink", "Tone Up Perfector - Blue",
28                                  "Yellowness Neutralizer - Purple", "Dullness eraser - Yellow"}; //PRIMER
29              stockprocess(colors1, colors2);
30              quit();
31          }
32          else if (menucontrol == 2) {
33              String[] item = {"Ring: 2.1g", "Ear Ring: 1.56g", "Necklace: 4.57g", "Locket: 2.5g","Bracelet: 3.24g"};
34              welcome();
35              System.out.println("\n==WELCOME TO GOLD JEWELLERY EMPIRE==");
36              Login();
37              showMessage();
38              budget(item);
39          }
40          else if (menucontrol == 3) {
41              welcome();
42              System.out.println("\n==WELCOME TO SUGARBOMB EMPIRE==");
43              Login();
44              perfume();
45          }
46          else if (menucontrol == 4) {
47              welcome();
48              Login();
49              double [] pricee  = {30,25,35,45,40,60};
50              skincare(pricee);
51          }
52          else if (menucontrol == 5) {
53              welcome();
54              Login();
55              System.out.println("National Cancer Society Malaysia (NCSM) had organized a campaign recently");
56              System.out.println("");
57
58              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.");
59
60              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!");
61              System.out.println("");
62
63              System.out.println("The public is welcome to take part in this event to show us your support!");
64              System.out.println("");
65              System.out.println("------------------------------------------------------------------------------------------------------------------------------------------------------------------------");
66
67              interest(0);
68          }
69          else {
70              System.out.println("Not available. Please try again....");
71          }
72      }
73
74      public static void welcome() {
75          System.out.println();
76          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 0 0 0  0 0 0 0 0 0 0");
77          System.out.println(" 0     0 0     0   0            0            0            0            0 0          0       0");
78          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");
79          System.out.println("   0 0     0 0     0            0            0            0            0 0          0       0");
80          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 0 0 0 0");
81          System.out.println("\n!!!!!!!WELCOME TO THE BEAUTY EMPIRE!!!!!!!");
82      }
83
84      public static void login() {
85          Scanner scan = new Scanner (System.in);
86          String usernamein;
87          int passwordin, password = 123456;
88          System.out.println("\nPlease log in your account.");
89
90          for (int time = 0; time >=0; time++) {
91              System.out.print("Username: ");
92              usernamein = scan.next();
93              System.out.print("Password: ");
94              passwordin = scan.nextInt();
95              if (passwordin==password) {
96                  System.out.println("Login successfully....");
97                  break;
98              }
99              else
100                 System.out.println("Password wrong. Please login again.");
101                 System.out.println();
102
103         }
104     }
105
106     public static void customerdetails() {
107         Scanner scan = new Scanner (System.in);
108         System.out.println("\n*PLEASE ENTER YOUR DETAILS*");
109         System.out.println("1. Please enter your name: ");
110         String name = scan.nextLine();
111
112         System.out.println("2. Please enter your NRIC: ");
113         String ic = scan.nextLine();
114
115         System.out.println("3. Please enter your email: ");
116         String email = scan.nextLine();
117
118         System.out.println("5. Please enter your contact number: ");
119         String num = scan.nextLine();
```

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```java
120
121         System.out.println("6. Please enter your address: ");
122         String address = scan.nextLine();
123
124
125         System.out.println("=========================================================");
126         System.out.println("========================PERSONAL DETAILS=================");
127         System.out.println("=========================================================");
128         System.out.println("Name             : "+ name);
129         System.out.println("NRIC             : "+ ic);
130         System.out.println("Email            : "+ email);
131         System.out.println("Contact number : "+ num);
132         System.out.println("Address          : "+ address);
133         System.out.println("=========================================================");
134         System.out.println("=========================================================");
135
136     }
137
138°    public static void thank() {
139         System.out.println();
140         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          0");
141         System.out.println("      0           0          0         0        0        0 0       0 0      0 0      0 0      0          0   0  0      0");
142         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");
143         System.out.println("      0           0          0      0     0      0   0   0   0    0 0          0          0          0   0  0      0");
144         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");
145         System.out.println("\n!!!!!!!Thank you for your visit!!!!!!!");
146     }
147
148°    public static int menu() {
149         Scanner scan = new Scanner (System.in);
150         String [] menu = new String [4];
151         menu[0] = "\n[1] ITEM";
152         menu[1] = "[2] GOOD RECEIVED NOTE";
153         menu[2] = "[3] PURCHASE RETURN";
154         menu[3] = "What do you want to do?";
155
156         for (int i = 0; i < menu.length; i++) {
157             System.out.println(menu[i] + " ");
158         }
159         int control = scan.nextInt();
160         return control;
161     }
162
163°    public static void stockprocess(String [] colors1, String [] colors2) {
164         Scanner scan = new Scanner (System.in);
165         String usernamein, dn1, dn2, suppliercode1, suppliercode2, suppliername1, suppliername2, date1, date2, r1, r2, r3, r4;
166         int control, control2;
167         int barcode1, barcode2, barcode3, barcode4, barcode5, barcode6, barcode7, barcode8, barcode9;
168         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;
169         control = menu();
170         if (control == 1) {
171             while (true) {
172                 System.out.println("\n[ITEM]");
173                 System.out.print("BARCODE:");
174                 barcode1 = scan.nextInt();
175
176                 if (barcode1 == 20020200){
177                     System.out.println("Item Name: Perfume Lipstick"); // barcode = 20020200
178                     System.out.println("Category: Lipstick");
179                     System.out.println("Supplier: Princess Production");
180                     System.out.println("Colour: " + colors1[0]);
181                     System.out.println("UOM: PCS");
182                     System.out.println("Unit Cost: RM36");
183                     System.out.println("Unit Price: RM120");
184                     System.out.println("Balance Quantity: " + bq1); //bq1
185                 }
186
187                 else if (barcode1 == 20020210) {
188                     System.out.println("Item Name: Perfume Lipstick"); // barcode = 20020210
189                     System.out.println("Category: Lipstick");
190                     System.out.println("Supplier: Princess Production");
191                     System.out.println("Colour: " +colors1[4]);
192                     System.out.println("UOM: PCS");
193                     System.out.println("Unit Cost: RM36");
194                     System.out.println("Unit Price: RM120");
195                     System.out.println("Balance Quantity: " + bq2); //bq1
196                 }
197
198                 else if (barcode1 == 20010156) {
199                     System.out.println("Item Name: Perfume Toner"); // barcode = 20010156
200                     System.out.println("Category: Toner");
201                     System.out.println("Supplier: Princess Production");
202                     System.out.println("UOM: BTL");
203                     System.out.println("Unit Cost: RM18");
204                     System.out.println("Unit Price: RM60");
205                     System.out.println("Balance Quantity: " + bq3); //bq2
206                 }
207
208                 else if (barcode1 == 20030232) {
209                     System.out.println("Item Name: Perfume Primer"); // barcode = 20030232
210                     System.out.println("Category: Primer");
211                     System.out.println("Supplier: Princess Production");
212                     System.out.println("Colour: " + colors2[2]);
213                     System.out.println("UOM: BTL");
214                     System.out.println("Unit Cost: RM15");
215                     System.out.println("Unit Price: RM60");
216                     System.out.println("Balance Quantity: " + bq4); //bq3
217                 }
218                 System.out.println("\nDo you want to search another item information?");
219                 System.out.println("[1] YES [2] NO");
220                 control2 = scan.nextInt();
221                 int a = 2;
222                 if (control2==a){
223                     break;
224                 }
225
226             }
227         }
228
229         control=menu();
230         if (control == 2) {
231             System.out.println("\n[GOOD RECEIVED NOTE]");
232             System.out.print("Document Number: "); //dn
233             scan.nextLine();
234             dn1 = scan.nextLine();
235             System.out.print("Supplier Code: ");
236             suppliercode1 = scan.nextLine();
237             System.out.print("Supplier Name: ");
238             suppliername1 = scan.nextLine();
239             System.out.print("Date: ");
240             date1 = scan.nextLine();
241
242             System.out.println("\nItem Barcode: ");
243             barcode2 = scan.nextInt(); // barcode = 20020200
244             System.out.print("Item Name: Perfume Lipstick (" + colors1[0] + ")");
245             System.out.print("\nQuantity: ");
246             q1 = scan.nextInt();
```

```java
            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:         Item Name:                \t\t  Quantity:    ");
            System.out.println(barcode2 + "\tPerfume Lipstick (" + colors1[0] + ")\t\t   " + q1);
            System.out.println(barcode2 + "\tPerfume Lipstick (" + colors1[4] + ")\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
            scan.nextLine();
            dn2 = scan.nextLine();
            System.out.print("Supplier Code: ");
            suppliercode2 = scan.nextLine();
            System.out.print("Supplier Name: ");
            suppliername2 = scan.nextLine();
            System.out.print("Date: ");
            date2 = scan.nextLine();

            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: ");
            scan.nextLine();
            r1 = scan.nextLine();

            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: ");
            scan.nextLine();
            r2 = scan.nextLine();

            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: ");
            scan.nextLine();
            r3 = scan.nextLine();

            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: ");
            scan.nextLine();
            r4 = scan.nextLine();

            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:         Item Name:                \t\t Quantity:     ");
            System.out.println(barcode6 + "\tPerfume Lipstick (" + colors1[0] + ")\t\t   " + q5 + "\n\t\tReason:" + r1);
            System.out.println("\n" + barcode7 + "\tPerfume Lipstick (" + colors1[4] + ")\t\t   " + q6 + "\n\t\tReason:" + r2);
            System.out.println("\n" + barcode8 + "\tPerfume Toner   \t\t\t   " + q7 + "\n\t\tReason:" + r3);
            System.out.println("\n" + barcode9 + "\tPerfume Primer (" + colors2[2] + ") " + q8 + "\n\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");
```

```java
367            System.out.println("Colour: " + colors1[4]);
368            System.out.println("UOM: PCS");
369            System.out.println("Unit Cost: RM36");
370            System.out.println("Unit Price: RM120");
371            System.out.println("Balance Quantity: " + CQ2); //CQ2
372        }
373
374        else if (barcode8 == 20010156) {
375            System.out.println("Item Name: Perfume Toner"); // barcode = 20010156
376            System.out.println("Category: Toner");
377            System.out.println("Supplier: Princess Production");
378            System.out.println("UOM: BTL");
379            System.out.println("Unit Cost: RM18");
380            System.out.println("Unit Price: RM60");
381            System.out.println("Balance Quantity: " + CQ3); //CQ3
382        }
383
384        else if (barcode8 == 20030232) {
385            System.out.println("Item Name: Perfume Primer"); // barcode = 20030232
386            System.out.println("Category: Primer");
387            System.out.println("Supplier: Princess Production");
388            System.out.println("Colour: " + colors2[2]);
389            System.out.println("UOM: BTL");
390            System.out.println("Unit Cost: RM15");
391            System.out.println("Unit Price: RM60");
392            System.out.println("Balance Quantity: " + CQ4); //CQ4
393        }
394
395        System.out.println("\nDo you want to search another item information?");
396        System.out.println("[1] YES [2] NO");
397        control2 = scan.nextInt();
398        int b = 2;
399        if (control2==b){
400            break;
401        }
402    }
403    }
404
405    }
406
407    public static void quit() {
408        int control3=0;
409        Scanner scan = new Scanner (System.in);
410        System.out.println("\nDo you want to quit the program?");
411        while (true) {
412            System.out.println("[1] YES [2] NO");
413            control3 = scan.nextInt();
414            int c = 1;
415            if (control3==c){
416                break;
417            }
418        }
419        thank();
420    }
421
422    public static void showMessage() {
423        System.out.println("\nPlease choose your budget range and gram.");
424        System.out.println("Note: Less than 5g need to pay wage cost");
425        System.out.println("\n");
426
427    }
428    public static void order() {
429        Scanner sc = new Scanner (System.in);
430
431        System.out.println("[1] Proceed Order or [2] Cancel Order");
432        int order = sc.nextInt();
433
434        while (order != 1 && order != 2) {
435            System.out.println("INVALID CODE");
436            System.out.println("Please enter confirmation code again");
437            order= sc.nextInt();
438        }
439
440        if (order ==1) {
441
442            customerdetails();
443            System.out.println("\n");
444
445            thank();
446    }
447
448    else if (order ==2) {
449        System.out.println("You have cancel your order");
450        thank();
451    }
452
453
454 }
455    public static void budget(String [] item) {
456        Scanner scan = new Scanner(System.in);
457
458        int total, total2, total3, total4, budget;
459        int gold = 240, wage = 250, delivery = 30, packaging = 15, insurance = 50;
460        double gram, ring = 2.1, earring = 1.56, necklace = 4.57, locket = 2.5, bracelet = 3.24;
461
462
463        System.out.println("Your budget range: ");
464        budget =scan.nextInt();
465
466        System.out.println("Your gram: ");
467        gram = scan.nextDouble();
468
469
470        if(gram < 5) {
471        String x = item[0];
472        String y = item[1];
473        System.out.println(x);
474        System.out.println(y);
475            total = (int)((gold * ring) + (gold * earring));
476        System.out.println();
477        System.out.println("Total gold price: RM" + total);
478        System.out.println();
479        System.out.println("Wage:RM250\n" + "Delivery:RM30\n" + "Packaging:RM15\n" + "Insurance:RM50");
480            total2 = (total + wage + delivery + packaging + insurance);
481        System.out.println("--------------------");
482        System.out.println("TOTAL: RM " + total2);
483        System.out.println("--------------------");
484
485        System.out.println();
486        order();
487        }
488
489        if(gram >= 5) {
490        String a = item[1];
491        String b = item[2];
492        String c = item[3];
493        String d = item[4];
```

9

```java
            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 perfume() {
        Scanner input = new Scanner (System.in);
        System.out.println("----------------------------------------------------------");
        System.out.println("                        SUGARBOMB EMPIRE                  ");
        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) : ");
        int 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();

        showMessage2();
    }

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

```java
619          for (i = 0; i <Parfum.length; i++) {
620              System.out.println(Parfum[i]);
621          }
622      break;
623
624      case "scarletedition":
625      case "SCARLETEDITION":
626          System.out.println("SCARLET EDITION | PRICE (RM 45.00)");
627          System.out.println();
628          for (i = 0; i <ScarletEdition.length; i++) {
629              System.out.println(ScarletEdition[i]);
630          }
631      break;
632
633      case "fruitiesseries":
634      case "FRUITIESSERIES":
635          System.out.println("FRUITIES SERIES  |  PRICE (RM 29.00)");
636          System.out.println();
637          for (i = 0; i <FruitiesSeries.length; i++) {
638              System.out.println(FruitiesSeries[i]);
639          }
640      break;
641      }
642
643      System.out.println();
644
645      System.out.print("How many perfume that you want : ");
646      totalperfume = input.nextInt();
647      System.out.println();
648
649          if (totalperfume <= 1) {
650              System.out.print("Choose your perfume : ");
651              perfumeName = input.next();
652              System.out.println();
653
654              System.out.print("How many quantity that you want : ");
655              quantity = input.nextInt();
656              System.out.println();
657
658              System.out.println("Add to cart : " +perfumeName);
659              System.out.println();
660
661              System.out.print("Enter the price :                    RM ");
662              price = input.nextDouble();
663              System.out.println();
664
665              totalprice = (price * quantity);
666
667              calculate1 (price, quantity, totalprice);
668
669              System.out.print("Pay the perfume :                    RM ");
670              pay = input.nextDouble();
671
672              calculate2 (pay, totalprice, change);
673              System.out.println();
674
675              showMessage3();
676          }
677
678          else if (totalperfume > 1) {
679
680
681              do {
682                  System.out.print("Choose your perfume : ");
683                  perfumeName = input.next();
684                  input.nextLine();
685                  System.out.println();
686
687                  System.out.print("How many quantity that you want for this perfume: ");
688                  quantity = input.nextInt();
689                  System.out.println();
690
691                  System.out.println("Add to cart : " +perfumeName);
692                  System.out.println();
693
694                  System.out.print("Enter the price :                    RM ");
695                  price = input.nextDouble();
696
697                  totalprice = (price * quantity);
698                  totalprice += price;
699                  count++;
700                  System.out.println();
701
702                  System.out.print("Do you want to choose another perfume? [Y/N] = ");
703                  code = input.next().charAt(0);
704                  System.out.println();
705
706              }while (code == 'y' || code == 'Y');
707
708              if (code == 'n' || code == 'N') {
709
710                  calculate1 (price, quantity, totalprice);
711
712                  System.out.println();
713
714                  System.out.print("Pay the perfume :                    RM ");
715                  pay = input.nextDouble();
716
717                  calculate2 (pay, totalprice, change);
718                  System.out.println();
719
720                  showMessage3();
721              }
722          }
723      }
724
725
726  public static void calculate1(double price, int quantity, double totalprice ) {
727      // TODO Auto-generated method stub
728
729      System.out.println("Total Price                       RM " + totalprice);
730      System.out.println();
731
732  }
733
734  public static void calculate2(double pay, double totalprice, double change) {
735      // TODO Auto-generated method stub
736
737      change = (pay - totalprice);
738
739      System.out.println();
740      System.out.println("Your change                       RM " + change);
741  }
742
```

11

```java
743  public static void showMessage3() {
744      // TODO Auto-generated method stub
745
746      System.out.println("YOU HAVE MADE THE PAYMENT FOR THIS PERFUME. \nBefore leave,");
747      customerdetails();
748      thank();
749
750  }
751
752  public static void skincare(double [] pricee) {
753      Scanner sc = new Scanner (System.in);
754      double price_charge = 20;
755      double amount, a2, a3, a4, a5, a6, a7, a8;
756      double price, p1, p2, p3, p4, p5, p6, p7, p8;
757      double finalprice, finalprice2;
758      double total,t1, t2, t3, t4, t5, t6, t7, t8;
759      double size1, size2, size3, size4;
760      char pricelist, ans;
761
762
763      System.out.println("\n_____Welcome to The Ordinary website, this is Beauty Empire!_____");
764      System.out.println();
765
766      customerdetails();
767      System.out.println();
768      System.out.println("*************************************************************************************");
769      System.out.println("*              Welcome to The Ordinary House of Beauty, this is Beauty Empire!        *");
770      System.out.println("*_____                                              *");
771      System.out.println("*                                                                                    *");
772      System.out.println("*Dear customer, before you proceed,                                                  *");
773      System.out.println("*We would like to inform that                                                        *");
774      System.out.println("*You can't buy more than 1 serum to experience free shipping!                        *");
775      System.out.println("*And you can add only two ingredient into your Serum.                                *");
776      System.out.println("*You will be charge RM20 if you add more than two ingredients into you Serum          *");
777      System.out.println("*************************************************************************************");
778      System.out.println();
779      System.out.print("Would You like to see the pricelist? [Y/N] :  ");
780      System.out.println();
781      pricelist= sc.next().charAt(0);
782
783      switch (pricelist) {
784      case 'N' :
785      case 'n' :
786          System.out.println("\nOppss! You have cancel your order and return to homepage!");
787          System.out.println("\nSee You next time!");
788          thank();
789          break;
790
791      case 'Y' :
792      case 'y' :
793
794          System.out.println("\nWhat a great Choice! Here is the ingredient!");
795          System.out.println();
796
797          priceList();
798
799
800          System.out.println("\nHere is the ingredients that you can add into your Serum ");
801          System.out.println("\nHappy Shopping!");
802          System.out.println();
803
804
805          System.out.println("\nNow please select your order size ");
806          System.out.println("\nYou can choose between 30ml or 60ml");
807          System.out.print("\nSize : ");
808          System.out.println();
809          size1 = sc.nextDouble();
810
811          while (size1 != 30 && size1 != 60) {
812              System.out.println("Sorry! The chosen size is unavailable");
813              System.out.print("Please select your order size : ");
814              size1 = sc.nextDouble();
815          }
816
817          if(size1 == 30) {
818              System.out.println("\nGreat! You can choose 30ml as your size of Serum's bottle");
819              System.out.println("\nNow choose your ingredient");
820              System.out.println();
821              System.out.print("\nEnter first ingredient : ");
822              String ingredient1 = sc.next();
823              System.out.print("\nEnter the quantity of " + ingredient1 + " : " );
824              amount = sc.nextDouble();
825              total = (amount*pricee[0]);
826
827              System.out.print("\nEnter second ingredient : ");
828              String ingredient2 = sc.next();
829              System.out.print("\nEnter the quantity of " + ingredient2 + " : " );
830              a2 = sc.nextDouble();
831              t1 = (a2*pricee[1]);
832
833              System.out.print("\nDo you want to add third ingredient? [Y/N]: ");
834              ans = sc.next().charAt(0);
835              switch (ans) {
836              case 'Y' :
837              case 'y' :
838                  System.out.printf("\nEnter third ingredient : ");
839                  String ingredient3 = sc.next();
840                  System.out.print("\nEnter the quantity of " + ingredient3 + " : " );
841                  a3 = sc.nextDouble();
842                  t3 = (a3*pricee[2]);
843                  System.out.println();
844                  System.out.println("_____");
845                  System.out.println();
846                  System.out.print("                    Your price for your Custom Serum is RM" + (total + t1 + t3 + price_charge));
847                  System.out.println();
848                  System.out.println("_____");
849                  System.out.println();
850                  System.out.println();
851                  System.out.print("\nYou cant buy more than 1 serum, Continue with your payment. ");
852                  System.out.print("\nEnter your payment Method :  ");
853                  String payment = sc.next();
854                  System.out.println("\nDelivery : Free Delivery ");
855                  System.out.println();
856                  System.out.println();
857
858                  greetings();
859                      break;
860
861              case 'N' :
862              case 'n' :
863                  System.out.println("_____");
864                  System.out.println();
865                  System.out.print("                    Your price for your Custom Serum is RM" + (total + t1 ));
866                  System.out.println();
867                  System.out.println("_____");
```

```java
868            System.out.println();
869            System.out.println();
870            System.out.print("\nYou cant buy more than 1 serum, Continue with your payment. ");
871            System.out.print("\nEnter your payment Method :  ");
872            String payment2 = sc.next();
873            System.out.println("\nDelivery : Free Delivery ");
874            System.out.println();
875            System.out.println();
876
877            greetings();
878            break;
879          }
880        }
881
882        else if (size1 ==60) {
883          System.out.println("\nGreat! You can choose 60ml as your size of Serum's bottle");
884          System.out.println("\nNow choose your ingredient");
885          System.out.print("\nEnter first ingredient : ");
886          String ingredient4 = sc.next();
887          System.out.print("\nEnter the quantity of " + ingredient4 + " : " );
888          a4 = sc.nextDouble();
889          t4 = (a4*pricee[5]);
890
891          System.out.print("\nEnter second ingredient : ");
892          String ingredient5 = sc.next();
893          System.out.print("\nEnter the quantity of " + ingredient5 + " : " );
894          a5 = sc.nextDouble();
895          t5 = ((a5*pricee[5]));
896
897          System.out.print("\nDo you want to add third ingredient? [Y/N]: ");
898          ans = sc.next().charAt(0);
899          switch (ans) {
900          case 'Y' :
901          case 'y' :
902            System.out.printf("\nEnter third ingredient : ");
903            String ingredient6 = sc.next();
904            System.out.print("\nEnter the quantity of " + ingredient6 + " : " );
905            a6 = sc.nextDouble();
906            t6 = ((a6*pricee[3]));
907            System.out.println();
908            System.out.println("_____");
909            System.out.println();
910            System.out.print("                    Your  price for your Custom Serum is RM" + (t4 + t5 + t6 + price_charge ));
911            System.out.println();
912            System.out.println("_____");
913            System.out.println();
914            System.out.println();
915            System.out.print("\nYou cant buy more than 1 serum, Continue with your payment. ");
916            System.out.print("\nEnter your payment Method :  ");
917            String payment = sc.next();
918            System.out.println("\nDelivery : Free Delivery ");
919            System.out.println();
920            System.out.println();
921
922            greetings();
923
924            break;
925
926          case 'N' :
927          case 'n' :
928            System.out.println("_____");
929            System.out.println();
930            System.out.print("                    Your  price for your Custom Serum is RM" + (t4 + t5));
931            System.out.println();
932            System.out.println("_____");
933            System.out.println();
934            System.out.println();
935            System.out.print("\nYou cant buy more than 1 serum, Continue with your payment. ");
936            System.out.print("\nEnter your payment Method :  ");
937            String payment1 = sc.next();
938            System.out.println("\nDelivery : Free Delivery ");
939            System.out.println();
940            System.out.println();
941
942            greetings();
943
944            break;
945  }
946  }
947  }
948
949    }
950
951  public static void greetings() {
952      System.out.println("    *******************************************************************");
953      System.out.println("    *                                                                 *");
954      System.out.println("    *      We will send the receipt and the tracking number via email!*");
955      System.out.println("    *         You will get your order after 14days of working         *");
956      System.out.println("    *                                                                 *");
957      System.out.println("    *******************************************************************");
958
959      thank();
960
961
962  }
963
964
965  public static void priceList() {
966      System.out.println("\n                 Price-List for 30ml Serum :");
967      System.out.println();
968      System.out.println("              ****************************************************");
969      System.out.println("              *                                                  *");
970      System.out.println("              *     INGREDIENTS        QUANTITY      PRICE        *");
971      System.out.println("              *                                                  *");
972      System.out.println("              *_____*");
973      System.out.println("              *     Niancinamide 10%      1           30         *");
974      System.out.println("              *     Zinc 1%               1           25         *");
975      System.out.println("              *     Alpha Arbutin 2%      1           45         *");
976      System.out.println("              *     Beta Hydroxy 2%       1           35         *");
977      System.out.println("              *     Hyalucronic Acid 2%   1           30         *");
978      System.out.println("              *     Alpha Hydroxy Acid 30% 1          35         *");
979      System.out.println("              *                                                  *");
980      System.out.println("              ****************************************************");
981      System.out.println();
982      System.out.println();
983      System.out.println("\n                 Price-List for 60ml Serum :");
984      System.out.println();
985      System.out.println("              ****************************************************");
986      System.out.println("              *                                                  *");
987      System.out.println("              *     INGREDIENTS        QUANTITY      PRICE        *");
988      System.out.println("              *                                                  *");
989      System.out.println("              *_____*");
990      System.out.println("              *     Niancinamide 14%      1           45         *");
991      System.out.println("              *     Zinc 5%               1           40         *");
992      System.out.println("              *     Alpha Arbutin 6%      1           60         *");
993      System.out.println("              *     Beta Hydroxy 6%       1           60         *");
994      System.out.println("              *     Hyalucronic Acid 6%   1           45         *");
```

13

```java
995          System.out.println("          *      Alpha Hydroxy Acid 34%    1         60         *");
996          System.out.println("          *                                                     *");
997          System.out.println("          *****************************************************");
998          System.out.println();
999
1000     }
1001
1002⊖   public static void interest(int join) {
1003         Scanner sc=new Scanner(System.in);
1004         System.out.println("If you are interested to join our event, please enter 1" );
1005         System.out.println("If you are not interested, please enter 2.");
1006         System.out.println("Are you interested to join?");
1007         join = sc.nextInt();
1008
1009         if(join == 1) {
1010             inputDetails();
1011             payment();
1012             seatAllocation();
1013             calculation(37,25,11);
1014
1015         }
1016         else {
1017             thank();
1018             System.out.println("Thanks for your concern, hope to see you again next time!");
1019         }
1020
1021     }
1022
1023⊖   public static void inputDetails() {
1024         Scanner sc=new Scanner(System.in);
1025         System.out.println("");
1026         System.out.println("Thanks for your participation!");
1027         System.out.println("");
1028         System.out.println("You have to fill in your details for the registration purpose in this event.");
1029         System.out.println("");
1030
1031         customerdetails();
1032
1033         System.out.println("Please enter your age: ");
1034         int age = sc.nextInt();
1035
1036         System.out.println("Please enter your gender: ");
1037         String gender = sc.next();
1038
1039         System.out.println("======================================================================");
1040         System.out.println("======================================================================");
1041         System.out.println("Age              : "+ age);
1042         System.out.println("Gender           : "+ gender);
1043         System.out.println("======================================================================");
1044         System.out.println("======================================================================");
1045
1046         fees(age,gender);
1047
1048     }
1049
1050⊖   public static void fees(int age, String gender) {
1051         System.out.println("");
1052         System.out.println("For your information, ");
1053         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.");
1054         System.out.println("For each participant, the event organizer, MINI salon will donate extra RM 5 to NCSM to support their campaign.");
1055         System.out.println("");
1056
1057         if(gender.equals("female"))
1058         {
1059             if (age <= 12)
1060             {
1061                 System.out.println("Hi, Girl. Your fee is RM 5.");
1062             }
1063             else
1064             {
1065                 System.out.println("Hi, Miss/Mrs. Your fee is RM 10.");
1066             }
1067         }
1068         else
1069         {
1070             if (age <= 12)
1071             {
1072                 System.out.println("Hi, Boy. Your fee is RM 5.");
1073             }
1074             else
1075             {
1076                 System.out.println("Hi, Mr. Your fee is RM 7.");
1077             }
1078         }
1079
1080     }
1081
1082⊖   public static void payment() {
1083         Scanner sc =new Scanner(System.in);
1084
1085         System.out.println("Please select your payment method: ");
1086         System.out.println("1 - cash payment ");
1087         System.out.println("2 - online transfer payment");
1088         int pay = sc.nextInt();
1089
1090         if(pay == 1)
1091         {
1092             System.out.println("You have selected the cash payment method!");
1093             System.out.println("Please move to the cashier counter that is beside the entrance to complete your payment.");
1094             thank();
1095         }
1096         else
1097         {
1098             System.out.println("You have selected the online transfer payment method!");
1099             System.out.println("");
1100             System.out.println("The details of the receiver bank account are as below: ");
1101             System.out.println("");
1102             System.out.println("            Maybank                      ");
1103             System.out.println("            MINI salon              ");
1104             System.out.println("            173678460739            ");
1105             System.out.println("  Please type on the reference with \"Hair Donation\"  ");
1106             thank();
1107         }
1108     }
1109
1110⊖   public static void seatAllocation() {
1111         System.out.println("");
1112         System.out.println("*********************************************************************************");
1113         System.out.println("*********************************************************SEAT ALLOCATION*********");
1114         System.out.println("*********************************************************************************");
1115
1116         for(int i=8; i>=0; i--)
1117         {
1118
```

```java
            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
        }
    }

    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 sum = 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 " + sum);
        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("**********************************************************************************************************************");

    }
}
```

5.0 OUTPUT

Output 1 (Make Up):

```
Welcome to "Beauty Empire" Company

MAIN MENU
Please choose a category that you need
[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*
[2] JEWELLERY (PURCHASE OF JEWELLERY)
[3] PERFUME (CATEGORY)
[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)
[5] HAIR (DONATION)
1

  O     O    O  O O O O O O O  O            O O O O O O O O  O O O O O O O O  O O O O O O O O  O O O O O O O O
   O    O O   O  O             O            O                O                  O O      O        O      O   O
    O  O  O  O   O O O O O O O O O            O                O                  O      O        O      O O O O O O O O
     O O   O O   O             O             O                O                  O O      O        O   O
      O     O    O O O O O O O  O O O O O O O O  O O O O O O O  O O O O O O O O  O       O       O   O O O O O O O O

!!!!!!!WELCOME TO THE BEAUTY EMPIRE!!!!!!!

*FOR STAFF ONLY*

Please log in your account.
Username: ANG
Password: 123458
Password wrong. Please login again.

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: DO100124
Supplier Code: PP5566
Supplier Name: Princess Production
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: DO100124
Supplier Code: PP5566
Supplier Name: Princess Production
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: Princess Production
Date: 26/01/2022

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

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

Item Barcode:
20010156
Item Name: Perfume Toner
Quantity: 8
Reason: Broken Bottle

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

Information has been saved. Here is your report.

Document Number: PR100056

```
Supplier Code: PP5566
Supplier Name: Princess Production
Date: 26/01/2022
Barcode:        Item Name:                    Quantity:
20020200   Perfume Lipstick (Neon Red)         10
                    Reason:Damaged Packaging

20020210   Perfume Lipstick (Preppy Red)       6
                    Reason:Damaged Packaging

20010156   Perfume Toner                       8
                    Reason:Broken Bottle

20030232   Perfume Primer (Tone Up Perfector - Blue) 9
                    Reason:Damaged Packaging

[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

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

!!!!!!!Thank you for your visit!!!!!!!
```

Output 2 (Jewellery):

```
Welcome to "Beauty Empire" Company

MAIN MENU
Please choose a category that you need
[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*
[2] JEWELLERY (PURCHASE OF JEWELLERY)
[3] PERFUME (CATEGORY)
[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)
[5] HAIR (DONATION)
2

   O     O    O  O O O O O O O  O           O O O O O O O O  O O O O O O O O  O O O O O O O O  O O O O O O O O
   O    O O   O  O               O            O                O                O   O     O     O   O   O
    O  O   O  O  O O O O O O O O  O            O                O                O   O     O     O   O   O O O O O O O O O
     O O     O O   O               O            O                O                O O     O     O   O
      O       O  O O O O O O O  O O O O O O O O  O O O O O O O O  O O O O O O O O  O       O     O   O O O O O O O O

!!!!!!!WELCOME TO THE BEAUTY EMPIRE!!!!!!!!

==WELCOME TO GOLD JEWELLERY EMPIRE==

Please log in your account.
Username: ang
Password: 123458
Password wrong. Please login again.

Username: ang
Password: 123456
Login successfully....

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

*PLEASE ENTER YOUR DETAILS*
1. Please enter your name:
Oliver Ang
2. Please enter your NRIC:
0123-01-012345
3. Please enter your email:
oliver@hotmail.com
5. Please enter your contact number:
012-3456789
6. Please enter your address:
0123 Jalan Sri Putri 1 Taman Putri
=============================================================================
=======================PERSONAL DETAILS======================================
=============================================================================
Name            : Oliver Ang
NRIC            : 0123-01-012345
Email           : oliver@hotmail.com
Contact number : 012-3456789
Address         : 0123 Jalan Sri Putri 1 Taman Putri
=============================================================================
=============================================================================


 O O O O O O O O  O           O        O O O      O O O      O   O         O     O          O  O O O O O O O  O              O
            O     O           O       O     O    O     O    O   O        O O    O          O        O        O             O O
            O     O O O O O O O        O O O O O   O O O O O   O   O      O O    O   O O O   O        O        O             O  O
            O     O           O O      O   O       O   O   O   O O      O   O   O   O   O   O        O        O             O   O
            O     O           O   O    O     O    O     O    O    O    O     O  O       O   O        O O O O O O  O O O O O O  O    O

!!!!!!!Thank you for your visit!!!!!!!!
```

19

Output 3 (Perfume):

```
Welcome to "Beauty Empire" Company

MAIN MENU
Please choose a category that you need
[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*
[2] JEWELLERY (PURCHASE OF JEWELLERY)
[3] PERFUME (CATEGORY)
[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)
[5] HAIR (DONATION)
3

  O     O    O  O O O O O O O  O                  O O O O O O O  O O O O O O O  O O O O O O O  O O O O O O O
  O    O O   O  O             O                 O              O              O      O O    O      O O    O      O O
   O  O   O  O   O O O O O O O  O                O              O              O      O  O    O     O  O   O O O O O O O
    O O   O O   O             O               O              O              O      O O    O     O O    O      O
     O     O    O O O O O O O  O O O O O O O  O O O O O O O  O O O O O O O  O       O     O      O O O O O O O

!!!!!!!WELCOME TO THE BEAUTY EMPIRE!!!!!!!

==WELCOME TO SUGARBOMB EMPIRE==

Please log in your account.
Username: ang
Password: 123458
Password wrong. Please login again.

Username: ang
Password: 123456
Login successfully....
-------------------------------------------------------
                 SUGARBOMB EMPIRE
-------------------------------------------------------
        CATEGORY                ACCOUNT
-------------------------------------------------------
Which one do you want to see (enter 1 to see category) : 1


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 : PARFUM

PARFUM | PRICE (RM 49.00)

Intense
Blast
Julia
Isabelle
Elisa
Roselle
Layla

How many perfume that you want : 2

Choose your perfume : BLAST

How many quantity that you want for this perfume: 1

Add to cart : BLAST

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.
```

```
Before leave,

*PLEASE ENTER YOUR DETAILS*
1. Please enter your name:
Oliver Ang
2. Please enter your NRIC:
012345-01-0123
3. Please enter your email:
oliver@hotmail.com
5. Please enter your contact number:
012-3456789
6. Please enter your address:
0123 Jalan Sri Putri 1 Taman Putri
=============================================================================
=======================PERSONAL DETAILS=====================================
=============================================================================
Name            : Oliver Ang
NRIC            : 012345-01-0123
Email           : oliver@hotmail.com
Contact number  : 012-3456789
Address         : 0123 Jalan Sri Putri 1 Taman Putri
=============================================================================
=============================================================================

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

!!!!!!!Thank you for your visit!!!!!!!
```

Output 4 (Skin Care):

```
Welcome to "Beauty Empire" Company

MAIN MENU
Please choose a category that you need
[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*
[2] JEWELLERY (PURCHASE OF JEWELLERY)
[3] PERFUME (CATEGORY)
[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)
[5] HAIR (DONATION)
4

  O     O    O  O O O O O O O  O               O O O O O O O O  O O O O O O O O  O O O O O O O O  O O O O O O O O
   O   O O   O  O               O               O               O               O O   O   O   O   O
    O  O  O  O  O O O O O O O O  O               O               O               O   O   O     O   O O O O O O O O
     O O   O O  O               O               O               O               O   O   O     O   O
      O     O   O O O O O O O  O O O O O O O O  O O O O O O O O  O O O O O O O O  O     O     O   O O O O O O O O

!!!!!!!WELCOME TO THE BEAUTY EMPIRE!!!!!!!

Please log in your account.
Username: mira
Password: 123458
Password wrong. Please login again.

Username: mira
Password: 123456
Login successfully....


_____Welcome to The Ordinary website, this is Beauty Empire!_____


*PLEASE ENTER YOUR DETAILS*
1. Please enter your name:
MIRA
2. Please enter your NRIC:
012345-01-0123
3. Please enter your email:
qnamiyaa88@gmail.com
5. Please enter your contact number:
012-3456789
6. Please enter your address:
no 40 jalan abg sulaihi 986900 kapit
==============================================================================
======================PERSONAL DETAILS=======================================
==============================================================================
Name            : MIRA
NRIC            : 012345-01-0123
Email           : qnamiyaa88@gmail.com
Contact number : 012-3456789
Address         : no 40 jalan abg sulaihi 986900 kapit
==============================================================================
==============================================================================


*************************************************************************
*            Welcome to The Ordinary House of Beauty, this is Beauty Empire!           *
*_____*
*                                                                                       *
*Dear customer, 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] :
Y

What a great Choice! Here is the ingredient!


                Price-List for 30ml Serum :

        ****************************************************************
        *                                                              *
        *          INGREDIENTS         QUANTITY      PRICE             *
        *_____ *
        *                                                              *
        *        Niancinamide 10%          1          30               *
        *        Zinc 1%                   1          25               *
        *        Alpha Arbutin 2%          1          45               *
        *        Beta Hydroxy 2%           1          35               *
        *        Hyalucronic Acid 2%       1          30               *
        *        Alpha Hydroxy Acid 30%    1          35               *
        *                                                              *
        ****************************************************************


                Price-List for 60ml Serum :
```

```
*******************************************************************
*                                                                 *
*          INGREDIENTS            QUANTITY        PRICE           *
*_____*
*                                                                 *
*          Niancinamide 14%          1              45           *
*          Zinc 5%                    1              40           *
*          Alpha Arbutin 6%           1              60           *
*          Beta Hydroxy 6%            1              60           *
*          Hyalucronic Acid 6%        1              45           *
*          Alpha Hydroxy Acid 34%     1              60           *
*                                                                 *
*******************************************************************
```

Here is the ingredients that you can add into your Serum

Happy Shopping!

Now please select your order size

You can choose between 30ml or 60ml

Size :
50
Sorry! The chosen size is unavailable
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 : zinc

Enter the quantity of zinc : 3

Enter second ingredient : niancinamide

Enter the quantity of niancinamide : 3

Do you want to add third ingredient? [Y/N]: y

Enter third ingredient : aha

Enter the quantity of aha : 4

_____

                    Your price for your Custom Serum is RM325.0
_____

You cant buy more than 1 serum, Continue with your payment.
Enter your payment Method :   online transfer

Delivery : Free Delivery

      ****
      *   *
      *   We will send the receipt and the tracking number via email! *
      *   You will get your order after 14days of working   *
      *   *
      ****

  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

!!!!!!!Thank you for your visit!!!!!!!
```

## Output 5 (Hair):

```
Welcome to "Beauty Empire" Company

MAIN MENU
Please choose a category that you need
[1] MAKE UP  (CHECK STOCK) *STAFF ONLY*
[2] JEWELLERY (PURCHASE OF JEWELLERY)
[3] PERFUME (CATEGORY)
[4] SKIN CARE (PURCHASE OF SKIN CARE PRODUCT)
[5] HAIR (DONATION)
5

 O     O     O  O O O O O O O  O             O O O O O O O  O O O O O O O  O O O O O O O  O O O O O O O
  O   O O   O   O           O               O              O                O   O      O      O     O
   O O   O O    O  O O O O O O O  O          O              O              O   O      O      O   O O O O O O O
    O O   O O   O           O               O              O              O   O      O      O   O
     O     O    O O O O O O O  O O O O O O O  O O O O O O O  O O O O O O O  O     O      O   O O O O O O O

!!!!!!!WELCOME TO THE BEAUTY EMPIRE!!!!!!!

Please log in your account.
Username: qianyu
Password: 123458
Password wrong. Please login again.

Username: qianyu
Password: 123456
Login successfully....
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.


*PLEASE ENTER YOUR DETAILS*
1. Please enter your name:
Jenny Cheah
2. Please enter your NRIC:
0123-01-012345
3. Please enter your email:
qianyu@gmail.com
5. Please enter your contact number:
012-3456789
6. Please enter your address:
0123 Jalan Permas 1 Taman Permas
==============================================================================
========================PERSONAL DETAILS=====================================
==============================================================================
Name             : Jenny Cheah
NRIC             : 0123-01-012345
Email         : qianyu@gmail.com
Contact number : 012-3456789
Address         : 0123 Jalan Permas 1 Taman Permas
==============================================================================
==============================================================================
Please enter your age:
22
Please enter your gender:
female
================================================================
================================================================
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. 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"

```
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
```

!!!!!!!Thank you for your visit!!!!!!!

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****************************************************************************************************************************
*****************************************************SEAT ALLOCATION*******************************************************
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```
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!

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****************************************************************************************************************************
*******************************************************CALCULATION*********************************************************
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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*************************************************************
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```