De La Salle University- Manila
Gokongwei College of Engineering

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Subject / Section : LBYEC2A EEQ2

Remarks:

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Instructor's Signature : _____

Problem

Restaurant POS (Point of Sale) System

Create a basic Restaurant Point of Sale software using C-Language. Your restaurant must have at least 20 items to choose from.

To receive full credit, your software must have the minimum of the following features:

I. Enhanced security and anti-fraud protection

- Use of string functions
- System is encrypted with username and password
- Your project must include 3 sets of username and password.
- username and password must not exceed 20 characters long

II. Menu Display

- Use of void functions
- After a successful log-in, the program must display the restaurant's menu
- There are at least 20 menu items with corresponding code, name of the menu item, and price.

III. Action on Orders

- using Arrays, Functions. Conditional and Looping Statements
- After displaying the menu, the program will display the restaurant's options
- Back to Menu option will display the restaurant's menu again (II.)
- Take Order option will input orders by item code and automatically computes the total price

IV. Receipt

- Using Functions, Conditional and Looping Statements
- Receipt will show the summary of orders, quantity, price, and total
- An option for discount must also be included
- The program will accept cash payments and the system will display the amount of change to return.

V. others

You may include logical assumptions as part of your program provided that it is necessary.

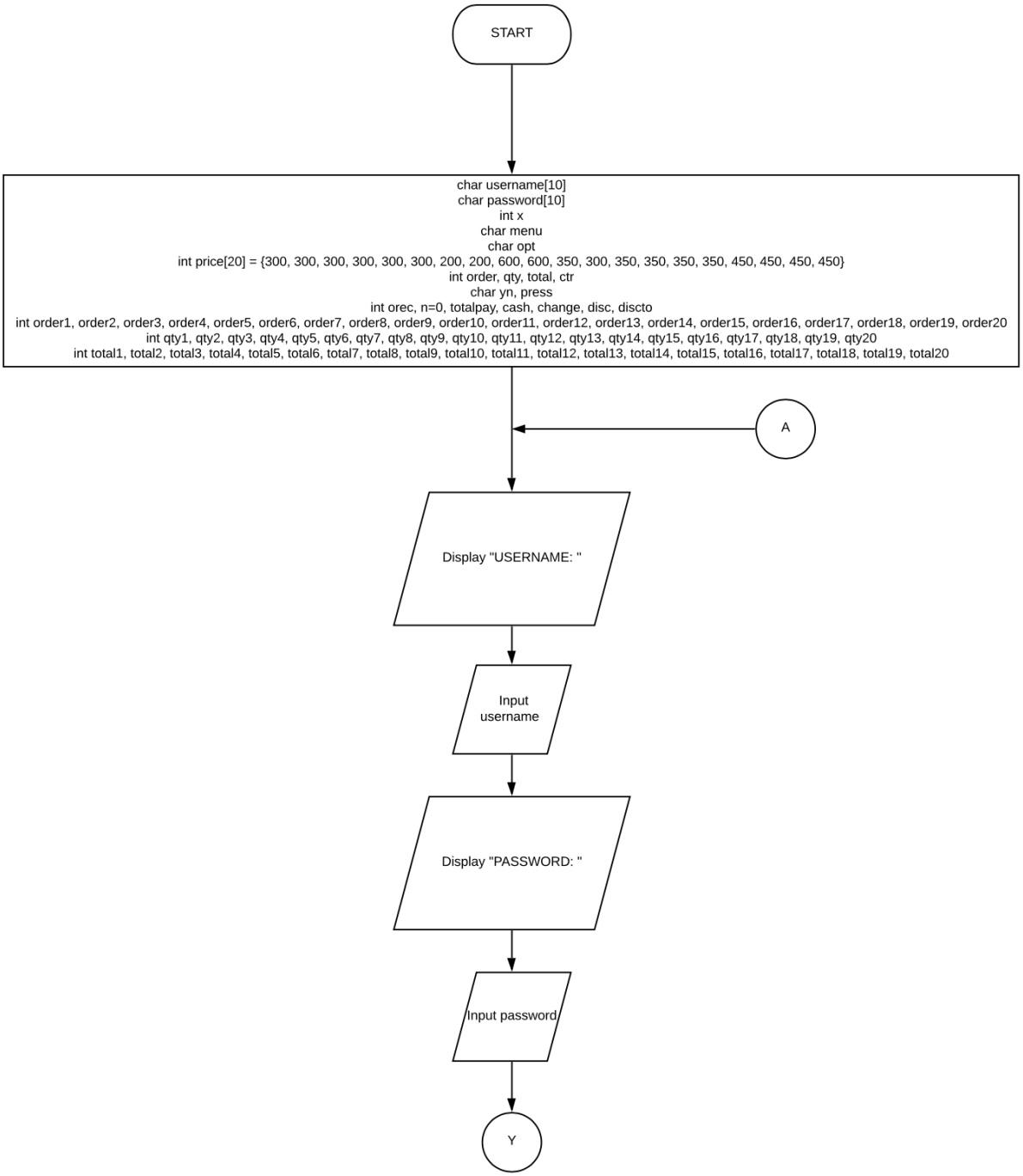
Important Notes:

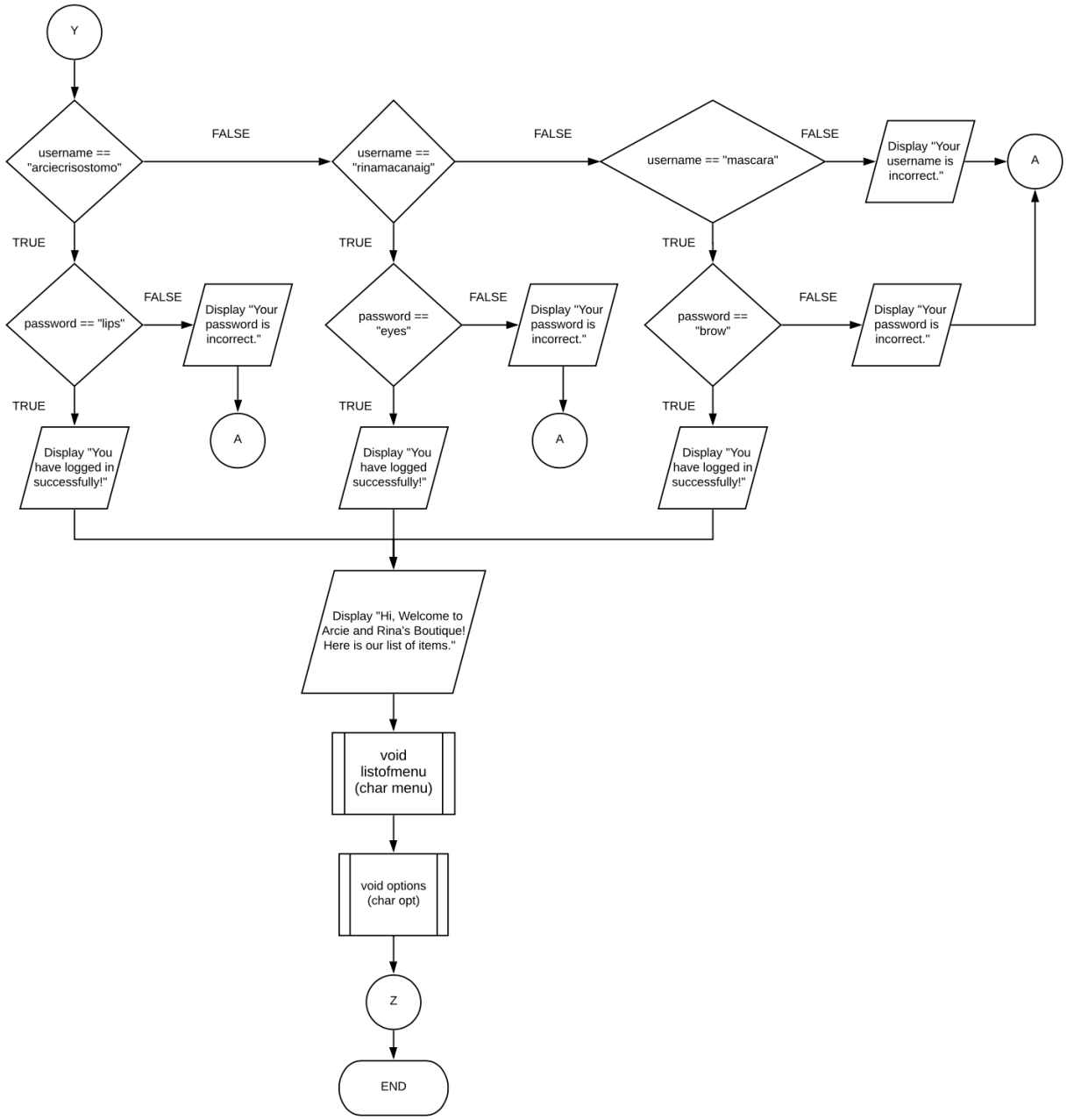
-This is a group project (by pair).

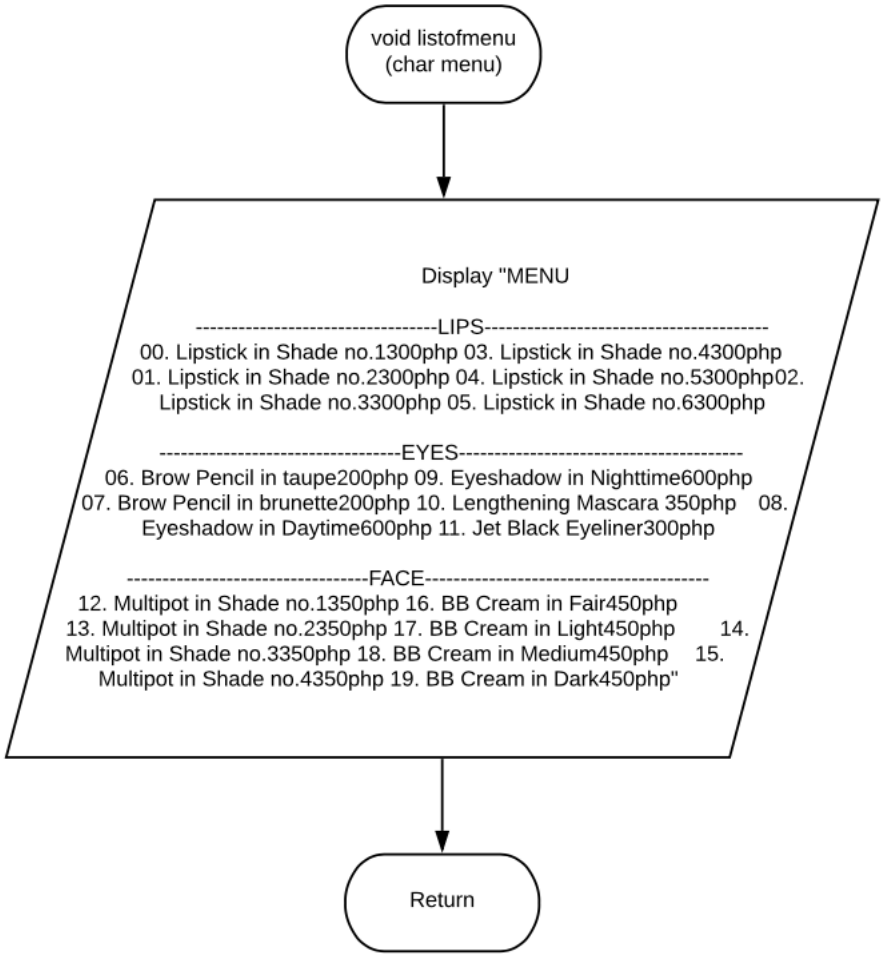
-Open source programs/codes are not allowed.

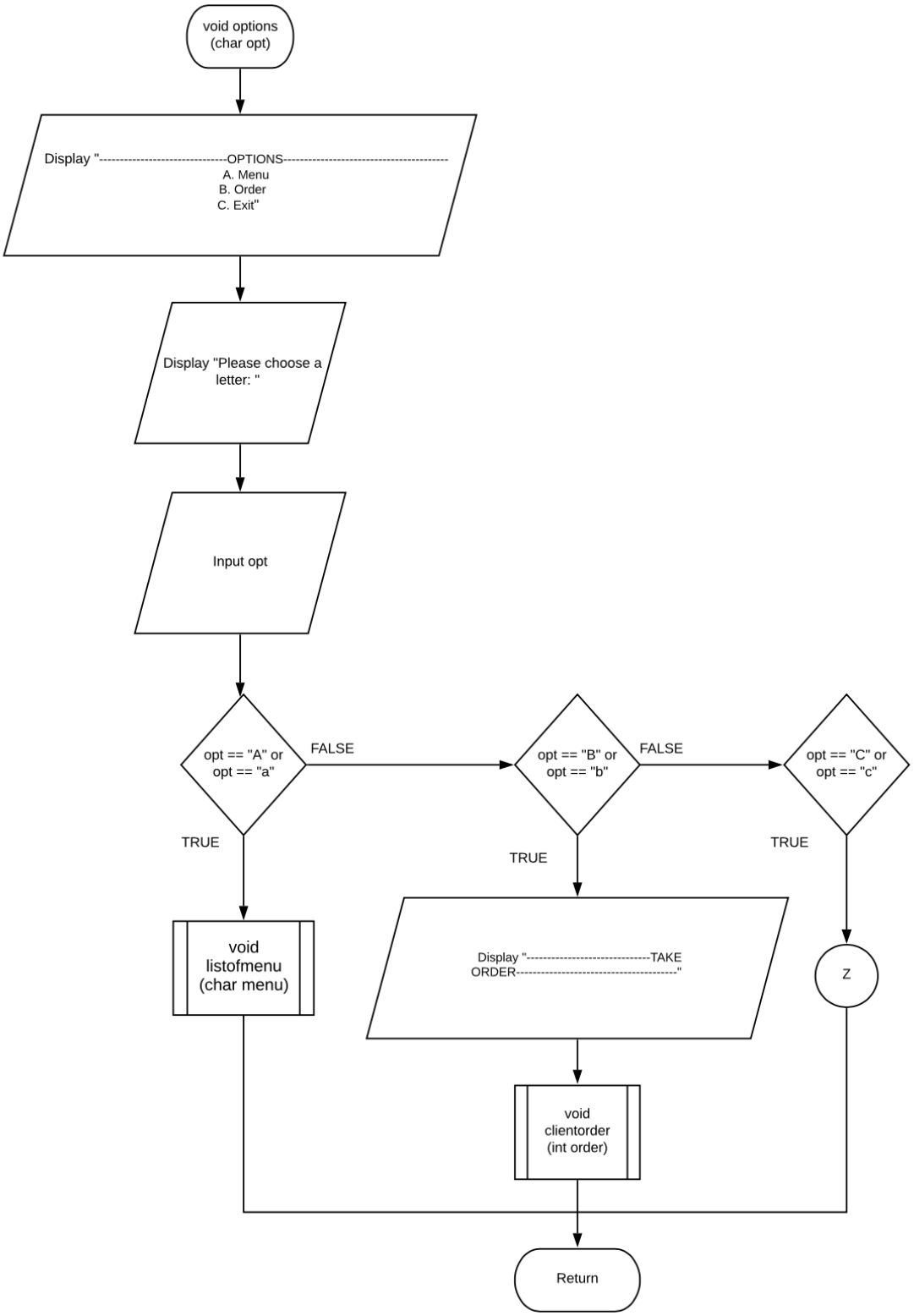
-Academic honesty should be observed at all times.

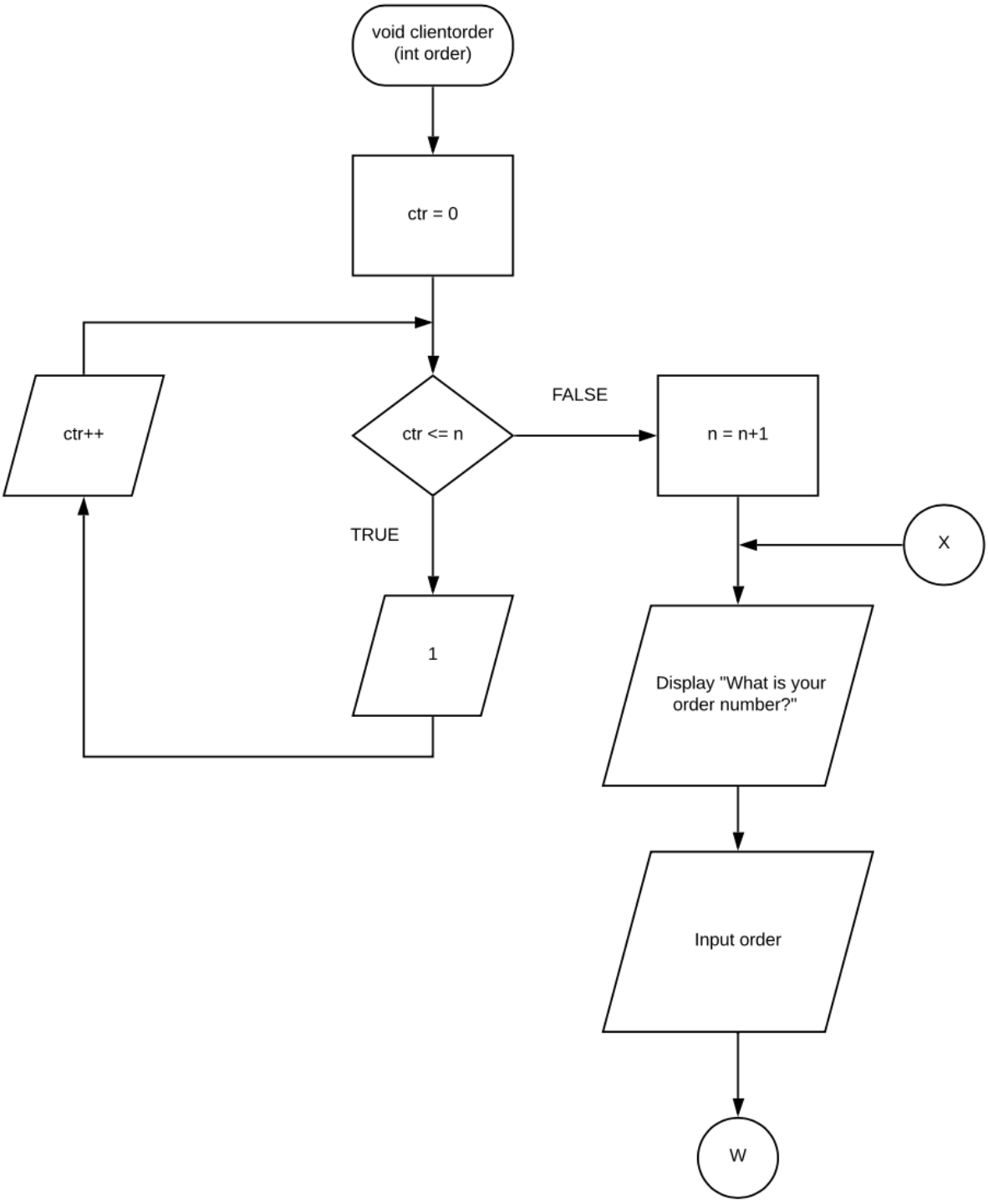
Flowchart:

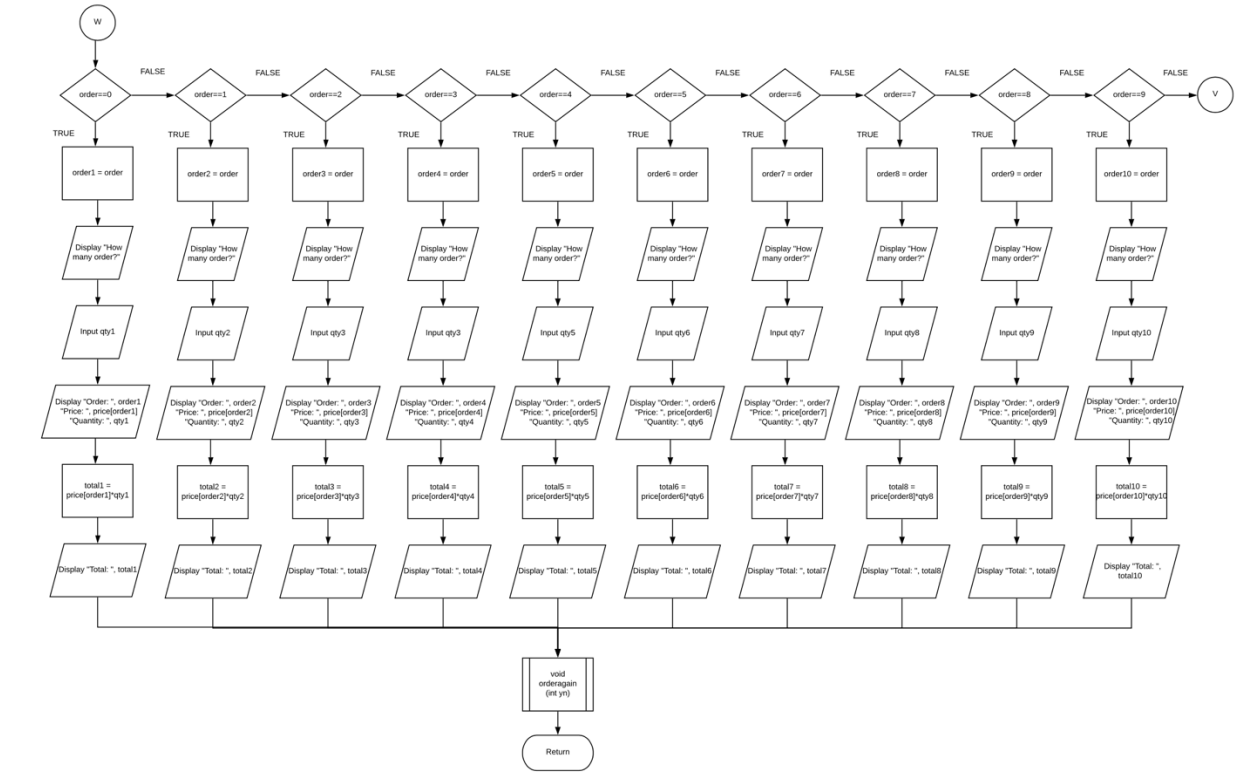

START
char username[10]
char password[10]
int x
char menu
char opt
int price[20] = {300, 300, 300, 300, 300, 300, 200, 200, 600, 600, 350, 300, 350, 350, 350, 350, 450, 450, 450, 450}
int order, qty, total, ctr
char yn, press
int orec, n=0, totalpay, cash, change, disc, discto
int order1, order2, order3, order4, order5, order6, order7, order8, order9, order10, order11, order12, order13, order14, order15, order16, order17, order18, order19, order20
int qty1, qty2, qty3, qty4, qty5, qty6, qty7, qty8, qty9, qty10, qty11, qty12, qty13, qty14, qty15, qty16, qty17, qty18, qty19, qty20
int total1, total2, total3, total4, total5, total6, total7, total8, total9, total10, total11, total12, total13, total14, total15, total16, total17, total18, total19, total20
A
Display "USERNAME: "
Input username
Display "PASSWORD: "
Input password
Y

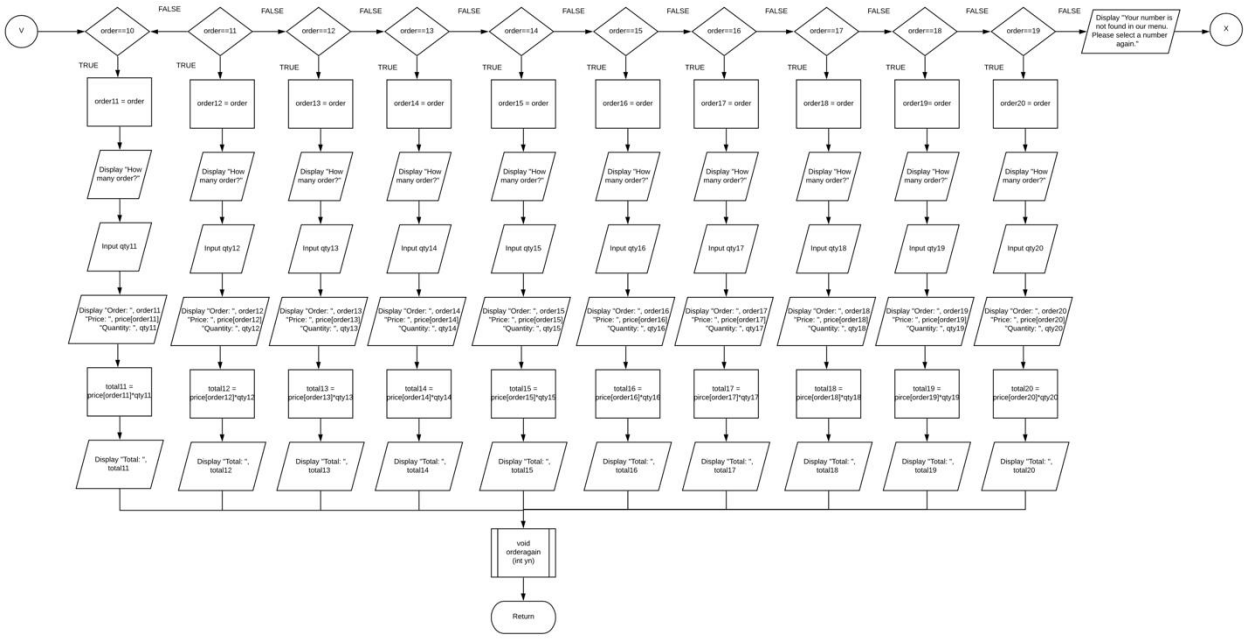

Y
username == "arciecrisostomo"
FALSE
username == "rinamacanaig"
FALSE
username == "mascara"
FALSE
Display "Your username is incorrect."
A
TRUE
TRUE
TRUE
password == "lips"
FALSE
Display "Your password is incorrect."
password == "eyes"
FALSE
Display "Your password is incorrect."
password == "brow"
FALSE
Display "Your password is incorrect."
TRUE
TRUE
TRUE
Display "You have logged in successfully!"
A
Display "You have logged successfully!"
A
Display "You have logged in successfully!"
Display "Hi, Welcome to Arcie and Rina's Boutique! Here is our list of items."
void listofmenu (char menu)
void options (char opt)
Z
END

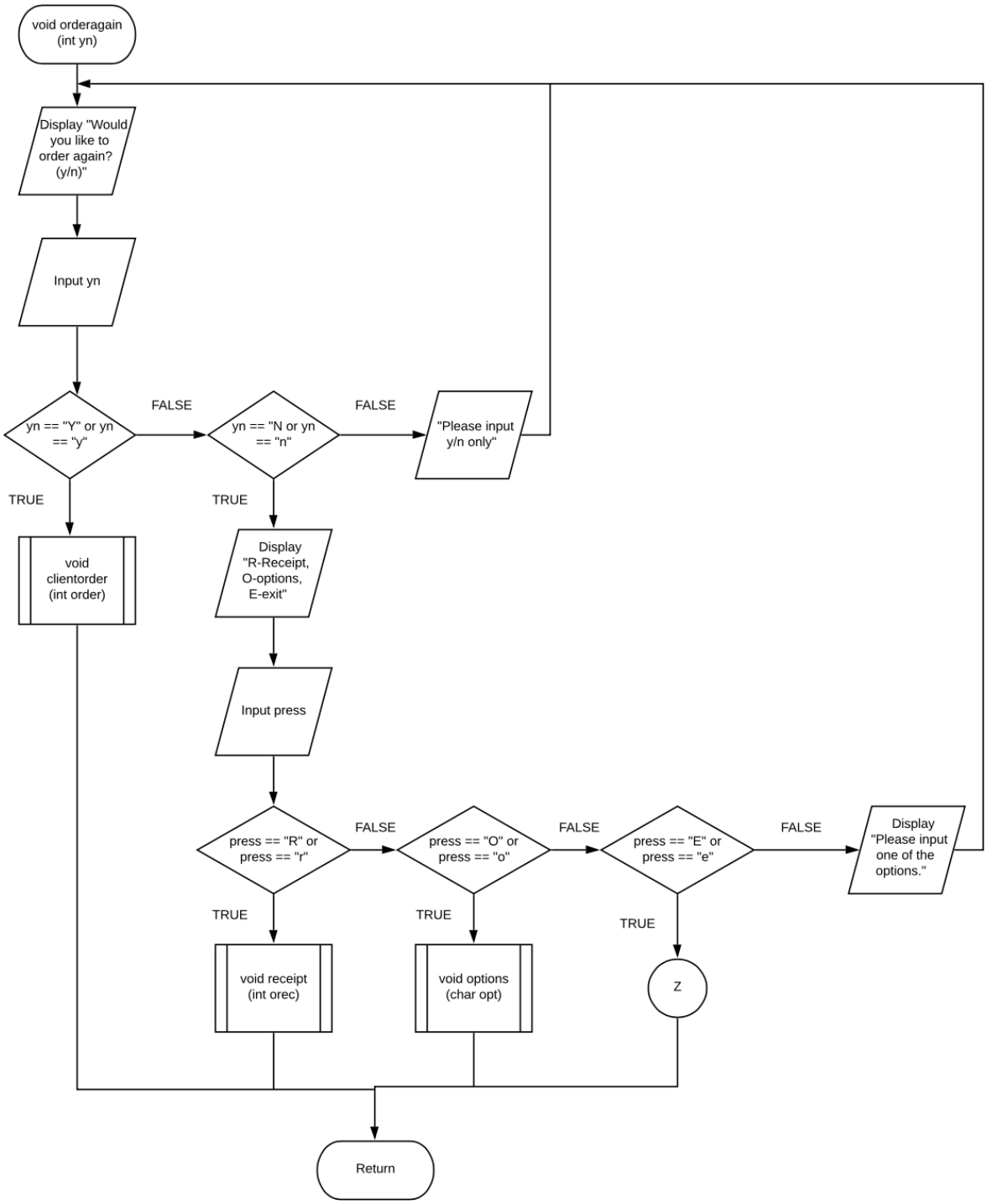

void listofmenu
(char menu)
Display "MENU
----------LIPS----------
00. Lipstick in Shade no.1300php 03. Lipstick in Shade no.4300php
01. Lipstick in Shade no.2300php 04. Lipstick in Shade no.5300php02.
Lipstick in Shade no.3300php 05. Lipstick in Shade no.6300php
----------EYES----------
06. Brow Pencil in taupe200php 09. Eyeshadow in Nighttime600php
07. Brow Pencil in brunette200php 10. Lengthening Mascara 350php 08.
Eyeshadow in Daytime600php 11. Jet Black Eyeliner300php
----------FACE----------
12. Multipot in Shade no.1350php 16. BB Cream in Fair450php
13. Multipot in Shade no.2350php 17. BB Cream in Light450php 14.
Multipot in Shade no.3350php 18. BB Cream in Medium450php 15.
Multipot in Shade no.4350php 19. BB Cream in Dark450php"
Return

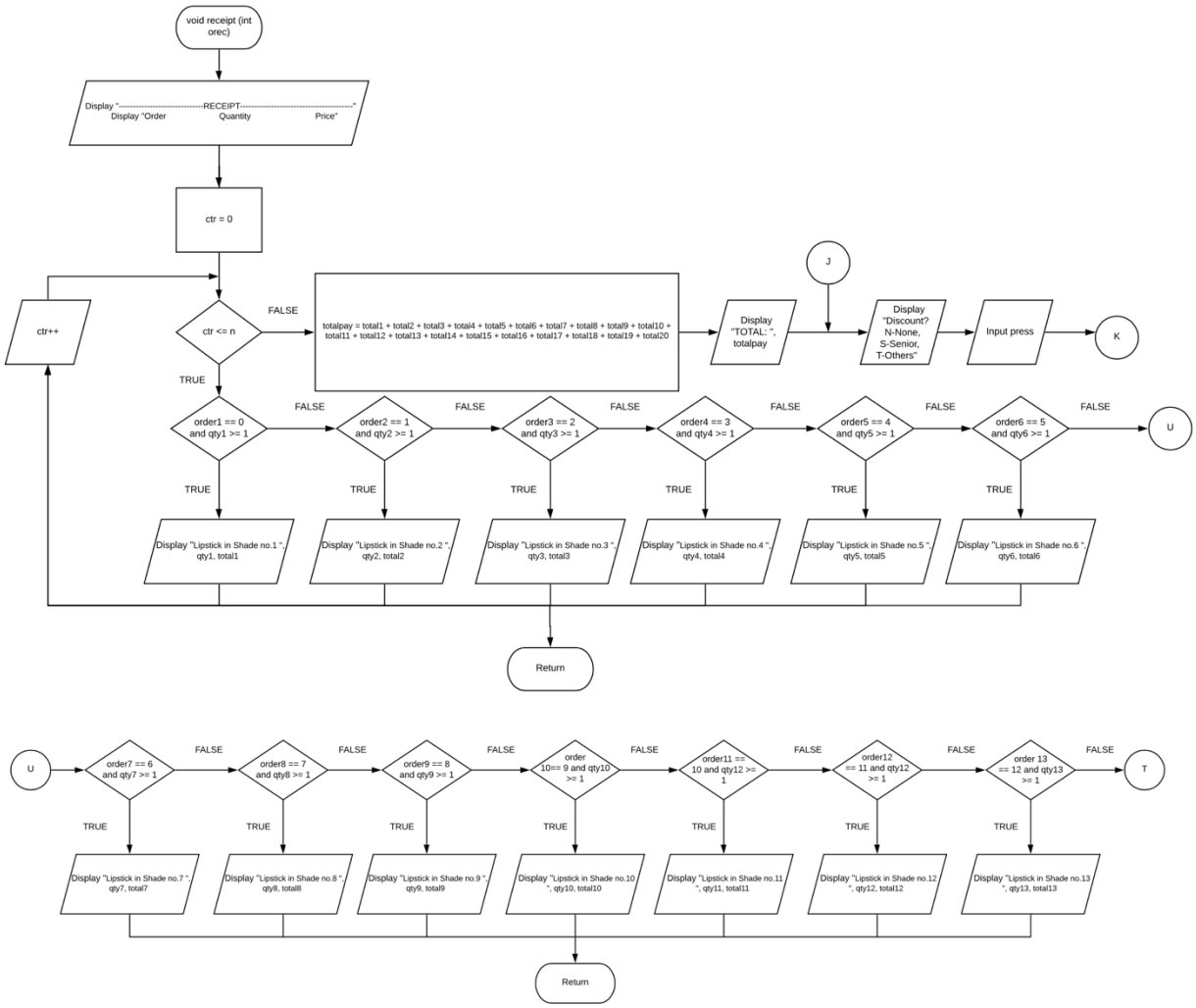

void options
(char opt)
Display "----------OPTIONS----------
A. Menu
B. Order
C. Exit"
Display "Please choose a letter: "
Input opt
opt == "A" or opt == "a"
FALSE
opt == "B" or opt == "b"
FALSE
opt == "C" or opt == "c"
TRUE
TRUE
TRUE
void listofmenu (char menu)
Display "----------TAKE ORDER----------"
Z
void clientorder (int order)
Return

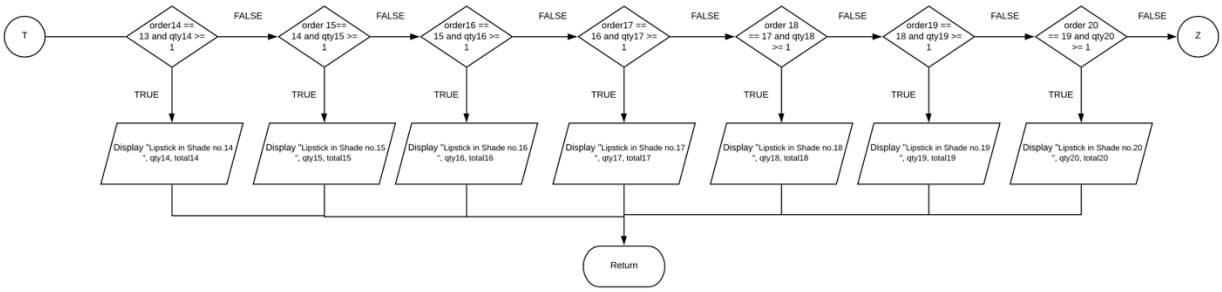

void clientorder
(int order)
ctr = 0
ctr++
ctr <= n
FALSE
n = n+1
TRUE
X
1
Display "What is your
order number?"
Input order
W

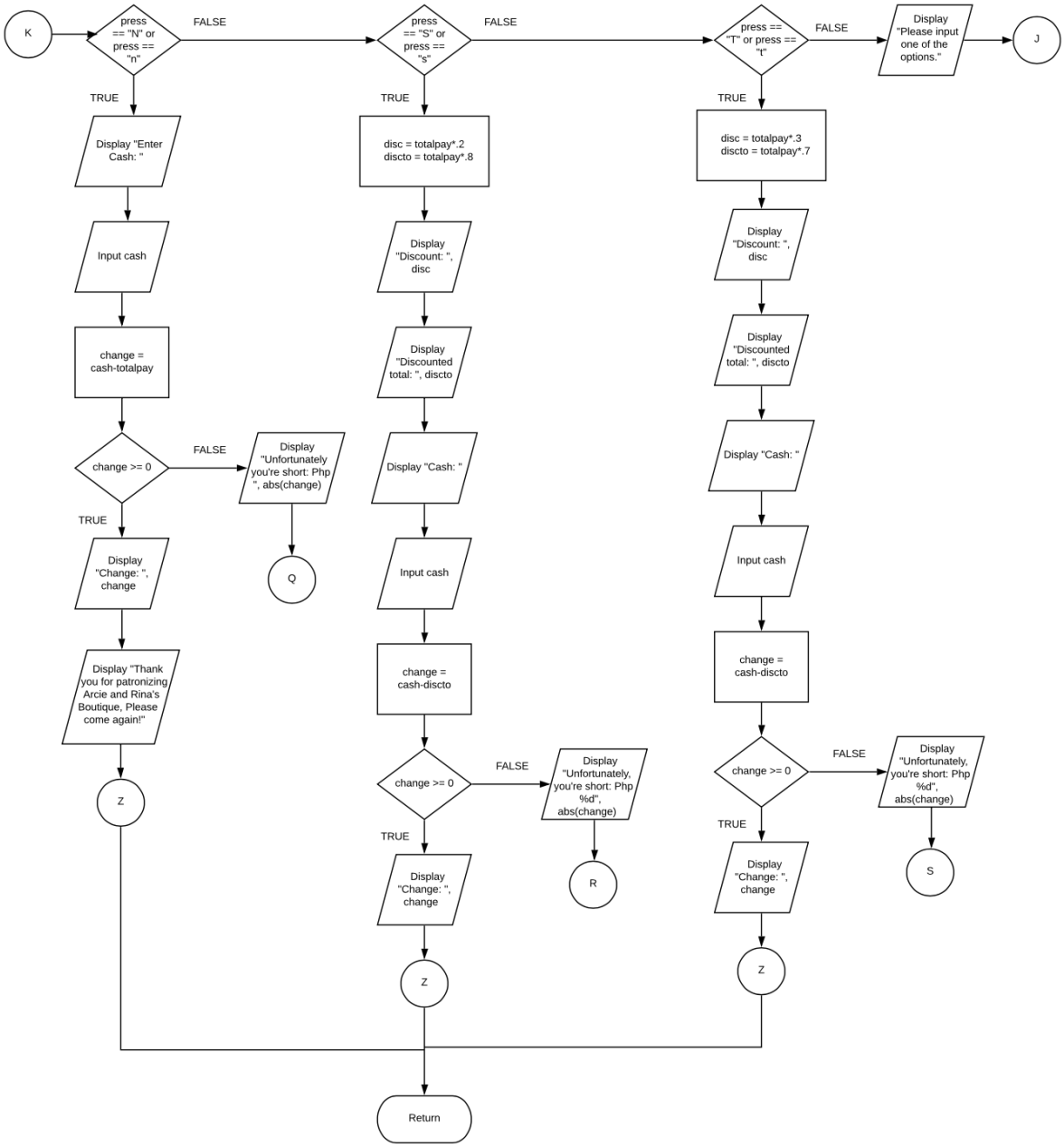

W
order==0
order==1
order==2
order==3
order==4
order==5
order==6
order==7
order==8
order==9
V
FALSE
TRUE
order1 = order
order2 = order
order3 = order
order4 = order
order5 = order
order6 = order
order7 = order
order8 = order
order9 = order
order10 = order
Display "How many order?"
Input qty1
Input qty2
Input qty3
Input qty5
Input qty6
Input qty7
Input qty8
Input qty9
Input qty10
Display "Order: ", order1 "Price: ", price[order1] "Quantity: ", qty1
Display "Order: ", order2 "Price: ", price[order2] "Quantity: ", qty2
Display "Order: ", order3 "Price: ", price[order3] "Quantity: ", qty3
Display "Order: ", order4 "Price: ", price[order4] "Quantity: ", qty4
Display "Order: ", order5 "Price: ", price[order5] "Quantity: ", qty5
Display "Order: ", order6 "Price: ", price[order6] "Quantity: ", qty6
Display "Order: ", order7 "Price: ", price[order7] "Quantity: ", qty7
Display "Order: ", order8 "Price: ", price[order8] "Quantity: ", qty8
Display "Order: ", order9 "Price: ", price[order9] "Quantity: ", qty9
Display "Order: ", order10 "Price: ", price[order10] "Quantity: ", qty10
total1 = price[order1]*qty1
total2 = price[order2]*qty2
total3 = price[order3]*qty3
total4 = price[order4]*qty4
total5 = price[order5]*qty5
total6 = price[order6]*qty6
total7 = price[order7]*qty7
total8 = price[order8]*qty8
total9 = price[order9]*qty9
total10 = price[order10]*qty10
Display "Total: ", total1
Display "Total: ", total2
Display "Total: ", total3
Display "Total: ", total4
Display "Total: ", total5
Display "Total: ", total6
Display "Total: ", total7
Display "Total: ", total8
Display "Total: ", total9
Display "Total: ", total10
void orderagain (int yn)
Return

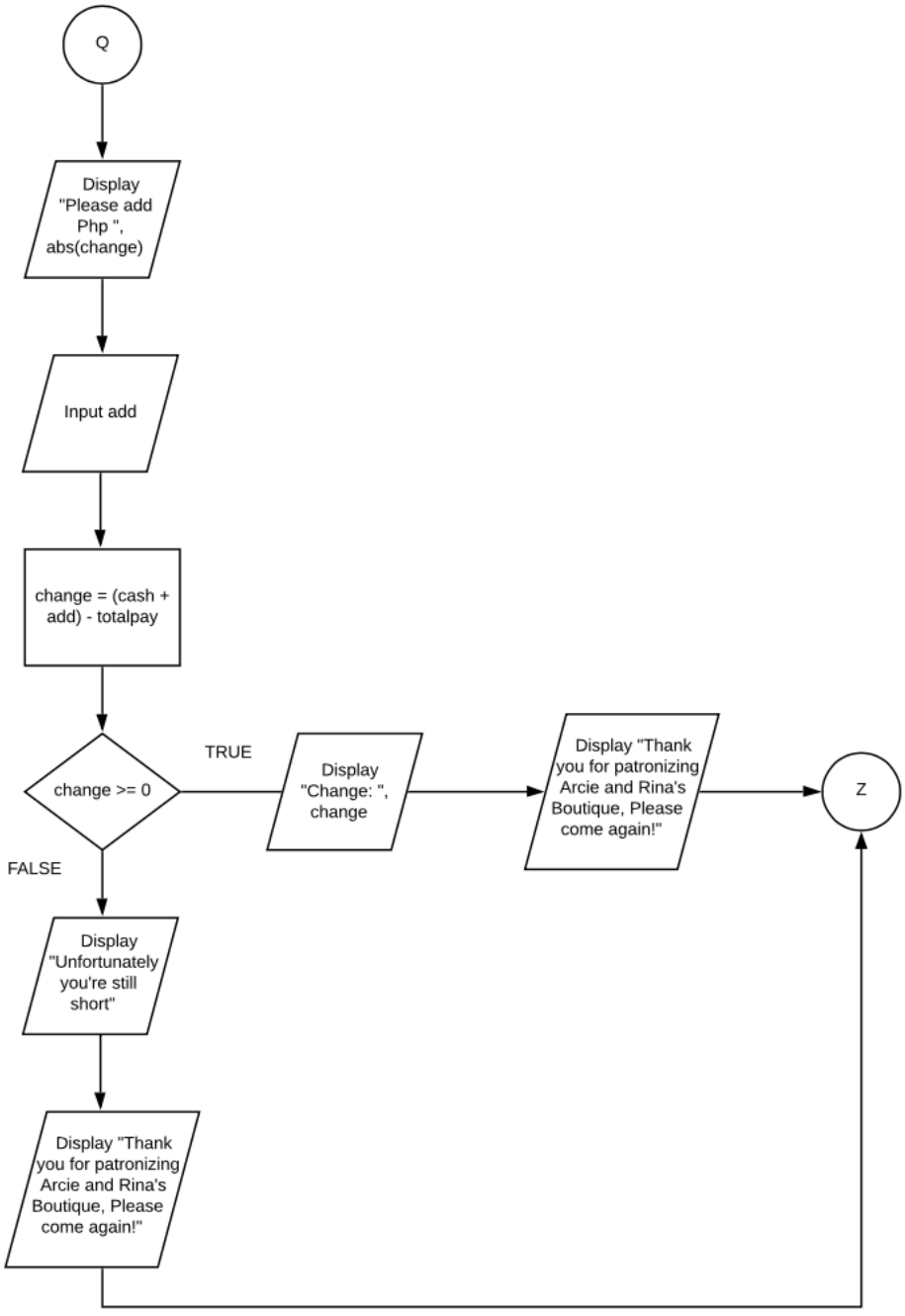

V
order==10
order==11
order==12
order==13
order==14
order==15
order==16
order==17
order==18
order==19
Display "Your number is not found in our menu. Please select a number again."
X
FALSE
TRUE
order11 = order
order12 = order
order13 = order
order14 = order
order15 = order
order16 = order
order17 = order
order18 = order
order19= order
order20 = order
Display "How many order?"
Input qty11
Input qty12
Input qty13
Input qty14
Input qty15
Input qty16
Input qty17
Input qty18
Input qty19
Input qty20
Display "Order: ", order11 "Price: ", price[order11] "Quantity: ", qty11
Display "Order: ", order12 "Price: ", price[order12] "Quantity: ", qty12
Display "Order: ", order13 "Price: ", price[order13] "Quantity: ", qty13
Display "Order: ", order14 "Price: ", price[order14] "Quantity: ", qty14
Display "Order: ", order15 "Price: ", price[order15] "Quantity: ", qty15
Display "Order: ", order16 "Price: ", price[order16] "Quantity: ", qty16
Display "Order: ", order17 "Price: ", price[order17] "Quantity: ", qty17
Display "Order: ", order18 "Price: ", price[order18] "Quantity: ", qty18
Display "Order: ", order19 "Price: ", price[order19] "Quantity: ", qty19
Display "Order: ", order20 "Price: ", price[order20] "Quantity: ", qty20
total11 = price[order11]*qty11
total12 = price[order12]*qty12
total13 = price[order13]*qty13
total14 = price[order14]*qty14
total15 = price[order15]*qty15
total16 = price[order16]*qty16
total17 = price[order17]*qty17
total18 = price[order18]*qty18
total19 = price[order19]*qty19
total20 = price[order20]*qty20
Display "Total: ", total11
Display "Total: ", total12
Display "Total: ", total13
Display "Total: ", total14
Display "Total: ", total15
Display "Total: ", total16
Display "Total: ", total17
Display "Total: ", total18
Display "Total: ", total19
Display "Total: ", total20
void orderagain (int yn)
Return

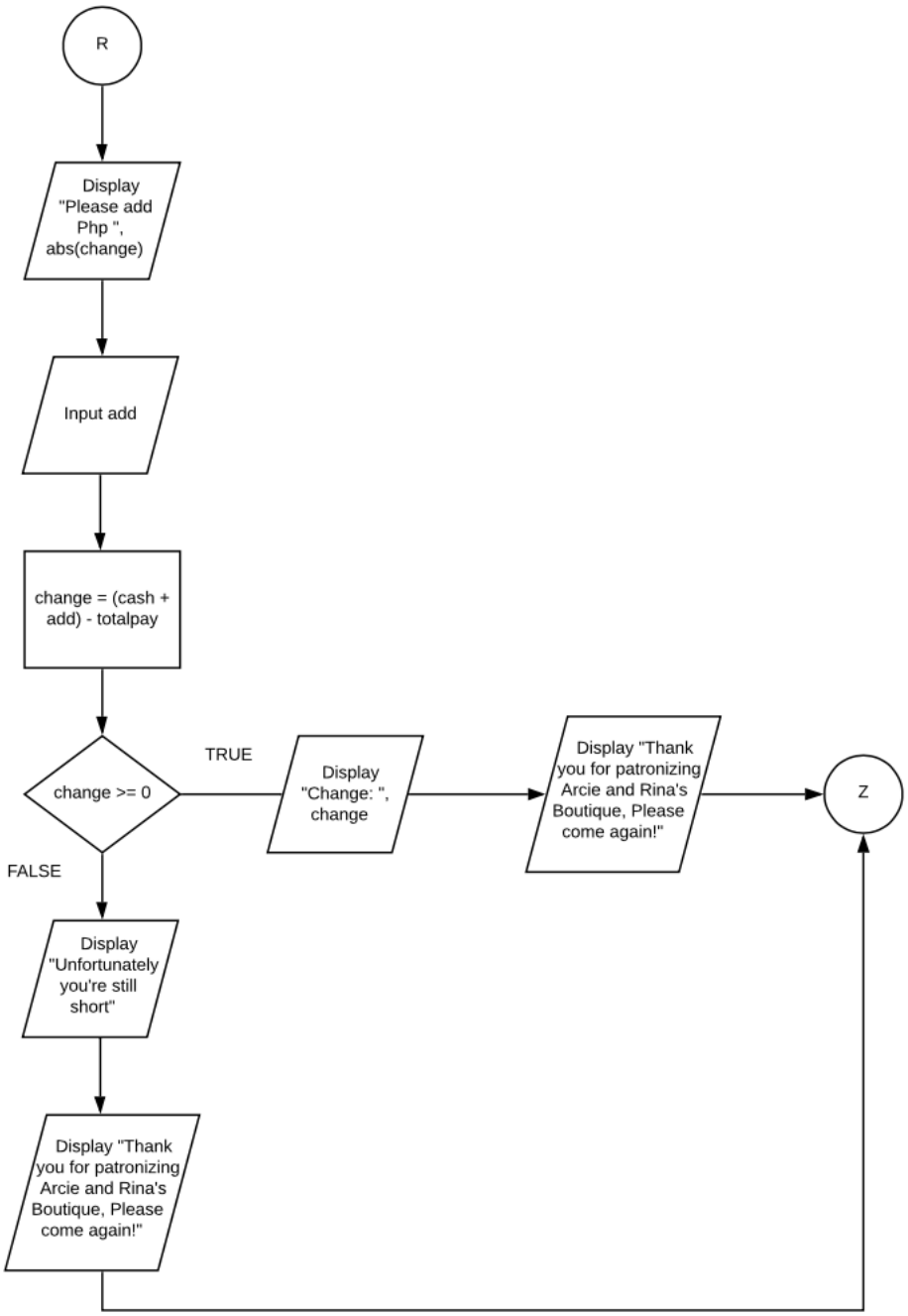

void orderagain (int yn)
Display "Would you like to order again? (y/n)"
Input yn
yn == "Y" or yn == "y"
FALSE
yn == "N or yn == "n"
FALSE
"Please input y/n only"
TRUE
TRUE
void clientorder (int order)
Display "R-Receipt, O-options, E-exit"
Input press
press == "R" or press == "r"
FALSE
press == "O" or press == "o"
FALSE
press == "E" or press == "e"
FALSE
Display "Please input one of the options."
TRUE
TRUE
TRUE
void receipt (int orec)
void options (char opt)
Z
Return

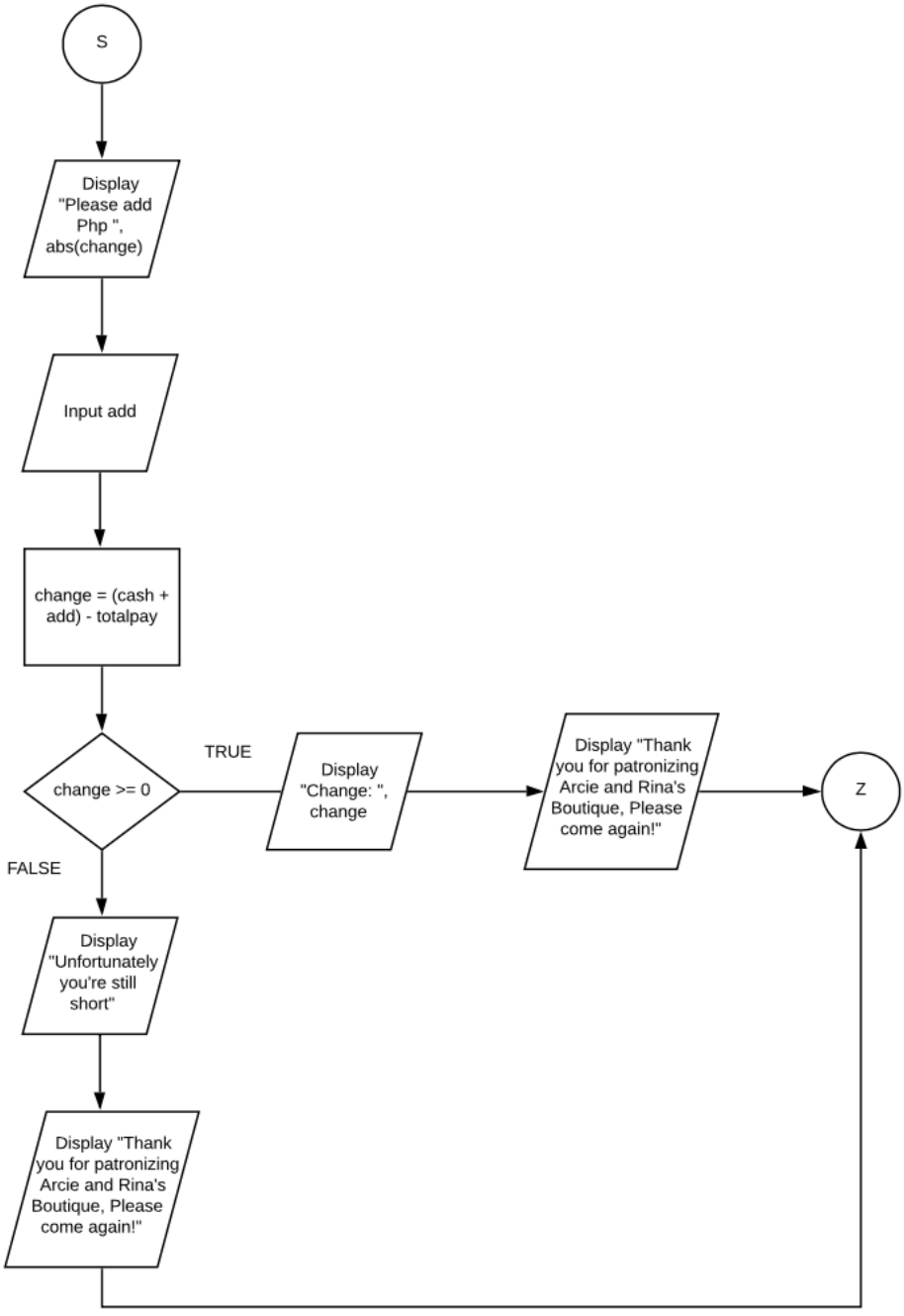

void receipt (int orec)
Display "----------RECEIPT----------"
Display "Order Quantity Price"
ctr = 0
ctr++
ctr <= n
FALSE
TRUE
totalpay = total1 + total2 + total3 + total4 + total5 + total6 + total7 + total8 + total9 + total10 + total11 + total12 + total13 + total14 + total15 + total16 + total17 + total18 + total19 + total20
Display "TOTAL: ", totalpay
J
Display "Discount? N-None, S-Senior, T-Others"
Input press
K
order1 == 0 and qty1 >= 1
order2 == 1 and qty2 >= 1
order3 == 2 and qty3 >= 1
order4 == 3 and qty4 >= 1
order5 == 4 and qty5 >= 1
order6 == 5 and qty6 >= 1
U
Display "Lipstick in Shade no.1 ", qty1, total1
Display "Lipstick in Shade no.2 ", qty2, total2
Display "Lipstick in Shade no.3 ", qty3, total3
Display "Lipstick in Shade no.4 ", qty4, total4
Display "Lipstick in Shade no.5 ", qty5, total5
Display "Lipstick in Shade no.6 ", qty6, total6
Return
U
order7 == 6 and qty7 >= 1
order8 == 7 and qty8 >= 1
order9 == 8 and qty9 >= 1
order 10== 9 and qty10 >= 1
order11 == 10 and qty12 >= 1
order12 == 11 and qty12 >= 1
order 13 == 12 and qty13 >= 1
T
Display "Lipstick in Shade no.7 ", qty7, total7
Display "Lipstick in Shade no.8 ", qty8, total8
Display "Lipstick in Shade no.9 ", qty9, total9
Display "Lipstick in Shade no.10 ", qty10, total10
Display "Lipstick in Shade no.11 ", qty11, total11
Display "Lipstick in Shade no.12 ", qty12, total12
Display "Lipstick in Shade no.13 ", qty13, total13
Return


T
order14 == 13 and qty14 >= 1
FALSE
order 15== 14 and qty15 >= 1
FALSE
order16 == 15 and qty16 >= 1
FALSE
order17 == 16 and qty17 >= 1
FALSE
order 18 == 17 and qty18 >= 1
FALSE
order19 == 18 and qty19 >= 1
FALSE
order 20 == 19 and qty20 >= 1
FALSE
Z
TRUE
Display "Lipstick in Shade no.14 ", qty14, total14
Display "Lipstick in Shade no.15 ", qty15, total15
Display "Lipstick in Shade no.16 ", qty16, total16
Display "Lipstick in Shade no.17 ", qty17, total17
Display "Lipstick in Shade no.18 ", qty18, total18
Display "Lipstick in Shade no.19 ", qty19, total19
Display "Lipstick in Shade no.20 ", qty20, total20
Return


K
press == "N" or press == "n"
FALSE
press == "S" or press == "s"
FALSE
press == "T" or press == "t"
FALSE
Display "Please input one of the options."
J
TRUE
Display "Enter Cash: "
Input cash
change = cash-totalpay
change >= 0
FALSE
Display "Unfortunately you're short: Php ", abs(change)
Q
TRUE
Display "Change: ", change
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"
Z
disc = totalpay*.2
discto = totalpay*.8
Display "Discount: ", disc
Display "Discounted total: ", discto
Display "Cash: "
Input cash
change = cash-discto
change >= 0
FALSE
Display "Unfortunately, you're short: Php %d", abs(change)
R
Display "Change: ", change
disc = totalpay*.3
discto = totalpay*.7
Display "Discount: ", disc
Display "Discounted total: ", discto
Display "Cash: "
Input cash
change = cash-discto
change >= 0
FALSE
Display "Unfortunately, you're short: Php %d", abs(change)
S
Display "Change: ", change
Return


Q
Display "Please add Php ", abs(change)
Input add
change = (cash + add) - totalpay
change >= 0
TRUE
Display "Change: ", change
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"
Z
FALSE
Display "Unfortunately you're still short"
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"


R
Display "Please add Php ", abs(change)
Input add
change = (cash + add) - totalpay
change >= 0
TRUE
Display "Change: ", change
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"
Z
FALSE
Display "Unfortunately you're still short"
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"


S
Display "Please add Php ", abs(change)
Input add
change = (cash + add) - totalpay
change >= 0
TRUE
Display "Change: ", change
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"
Z
FALSE
Display "Unfortunately you're still short"
Display "Thank you for patronizing Arcie and Rina's Boutique, Please come again!"

C-Language codes:

```
//header files

#include<conio.h>
#include<stdlib.h>
#include<windows.h>

/*Variabe declaratons*/
char username[10];//variables need for enhanced security
char password[10];
int x;


void listofmenu(char menu);//function for menu
char menu;//variable for menu


void options(char opt);//function for options
char opt;//variable for options
int
price[20]={300,300,300,300,300,300,200,200,600,600,350,300,350,350,350,350,450,450,450,45
0};//we defined the price of each product so it will be easier to read.


void clientorder(int order);//function for order
int order,qty,total,ctr;//variable for order


void orderagain(char yn);//function for yes or no option
char yn,press;//variables for order


void receipt(int orec);//function for receipt
int orec,n=0,totalpay,cash,change,disc,discto,add;//variables for receipt
int
order1,order2,order3,order4,order5,order6,order7,order8,order9,order10,order11,order12,order13
,order14,order15,order16,order17,order18,order19,order20;
int
qty1,qty2,qty3,qty4,qty5,qty6,qty7,qty8,qty9,qty10,qty11,qty12,qty13,qty14,qty15,qty16,qty17,q
ty18,qty19,qty20;
int
total1,total2,total3,total4,total5,total6,total7,total8,total9,total10,total11,total12,total13,total14,tot
al15,total16,total17,total18,total19,total20;
```

```
int main()//start the program
{
	printf("USERNAME: ");//ask user for username and password
	scanf("%s", &username);
	printf("PASSWORD: ");
	for (x = 0; x < 4 ; x++)//loop used to hide password
	{
		password[x]=getch();
		printf("*");
	}

	/*3 sets of account:
	(lipstick, lips)
	(eyeshadow, eyes)
	(mascara, brow)
	that can allow access*/
	if(strcmp(username,"arciecrisostomo")==0)
	{
		if(strcmp(password,"lips")==0)
		{
			printf("\nYou have logged in successfully!");
		}
		else
		{
			printf("\nYour password is incorrect.\n");
			main();
		}
	}

	else if(strcmp(username,"rinamacainag")==0)
	{
		if(strcmp(password,"eyes")==0)
		{
			printf("\nYou have logged in successfully!");
		}
		else
		{
			printf("\nYour password is incorrect.\n");
			main();
		}
	}

	else if(strcmp(username,"mascara")==0)
	{
		if(strcmp(password,"brow")==0)
		{
```

```
                printf("\nYou have logged in successfully!");
            }
            else
            {
                printf("\nYour password is incorrect.\n");
                main();
            }
        }

        else
        {
            printf("\nYour username is incorrect.\n");
            main();
        }

        printf("\n");
        printf("\nHi, Welcome to Arcie and Rina's Boutique!");
   printf("\nHere is our list of items.");
   listofmenu(menu);//go to menu function
   return 0;

}//end of main function



        void listofmenu(char menu)//menu function
        {
        printf("\n                                MENU                                ");//menu
display
   printf("\n");
   printf("\n----------------------------------LIPS----------------------------------------");
        printf("\n00. Lipstick in Shade no. 1  Php300          03. Lipstick in Shade no. 4
Php300\n01. Lipstick in Shade no. 2  Php300          04. Lipstick in Shade no. 5  Php300\n02.
Lipstick in Shade no. 3  Php300        05. Lipstick in Shade no. 6  Php300");
        printf("\n");
        printf("\n----------------------------------EYES----------------------------------------");
   printf("\n06. Brow Pencil in Taupe  Php200         09. Eyeshadow in Nighttime  Php600 \n07.
Brow Pencil in Brunette  Php200       10. Lengthening Mascara       Php350\n08. Eyeshadow in
Daytime  Php600       11. Jet Black Eyeliner  Php300");
   printf("\n");
        printf("\n----------------------------------FACE----------------------------------------");
   printf("\n12. Multipot in Shade no. 1  Php350       16. BB Cream in Fair  Php450\n13. Multipot
in Shade no. 2  Php350          17. BB Cream in Light  Php450\n14. Multipot in Shade no. 3
Php350          18. BB Cream in Medium  Php450\n15. Multipot in Shade no.4  Php350    19. BB
Cream in Dark  Php450");
        printf("\n");
```

```
        printf("\nPress any key to continue.");
        getch();//allows program to continue only if the user press any key
    options(opt);//go to option function
        }//end of main function


        void options(char opt)//option function
        {
                printf("\n-------------------------------OPTIONS---------------------------------------
");//print options
                printf("\nA. Menu");
                printf("\nB. Order");
                printf("\nC. Exit");
                printf("\n");
                printf("\nPlease choose a letter: ");//ask user for option
                scanf("%s", &opt);
                printf("\n");
                if(opt =='A'||opt=='a')//if and else statements used because each option results in
different outcomes
                {
                        system("cls");//clear system before displaying menu
                        listofmenu(menu);//go to menu function, display the menu once again
                }
                else if(opt=='B'||opt=='b')
                {

                        printf("\n-------------------------------TAKE ORDER-----------------------------
----------\n");
                        printf("\n");
                        clientorder(order);//go to take order function
                }
                else if(opt=='C'||opt=='c')
                {
                        exit (0);//end program
                }

       else {
          printf("Please select one of the options.\n");
          options(opt);//loop print of option function until the user chooses one of the options
       }
          }//end of option function


          void clientorder(int order)//function fo taking orders
          {
                  for(ctr=0;ctr<=n;ctr++)//loop to know how many order the user will take
```

```
		{
			1;
		}
		n=n+1;//n is intially 1 but when the user inputs y (yes, order again), it will add 1
	printf("What is your order number? ");//asks user for order number
	scanf("%d",&order);

	if(order==0){//if and else statements for each product
	order1=order;//to equal "0" code in the menu as order1 code for computing easily since "0" has a value(array)
	printf("How many order? ");//asks for quantity
	scanf("%d",&qty1);
	printf("Order: %d", order1);
	printf("\nPrice: %d", price[order1]);
	printf("\nQuantity: %d", qty1);
	total1= price[order1]*qty1;
	printf("\nTotal: %d", total1);}

	else if(order==1){
	order2=order;
	printf("How many order? ");
	scanf("%d",&qty2);
	printf("Order: %d", order2);
	printf("\nPrice: %d", price[order2]);
	printf("\nQuantity: %d", qty2);
	total2= price[order2]*qty2;
	printf("\nTotal: %d", total2);}

	else if(order==2){
	order3=order;
	printf("How many order? ");
	scanf("%d",&qty3);
	printf("Order: %d", order3);
	printf("\nPrice: %d", price[order3]);
	printf("\nQuantity: %d", qty3);
	total3= price[order3]*qty3;
	printf("\nTotal: %d", total3);}

	else if(order==3){
	order4=order;
	printf("How many order? ");
	scanf("%d",&qty4);
	printf("Order: %d ", order4);
	printf("\nPrice: %d", price[order4]);
	printf("\nQuantity: %d", qty4);
	total4= price[order4]*qty4;
```

```
        printf("\nTotal: %d", total4);}

        else if(order==4){
        order5=order;
        printf("How many order? ");
        scanf("%d",&qty5);
        printf("Order: %d ", order5);
        printf("\nPrice: %d", price[order5]);
        printf("\nQuantity: %d", qty5);
        total5= price[order5]*qty5;
        printf("\nTotal: %d", total5);}

        else if(order==5){
        order6=order;
        printf("How many order? ");
        scanf("%d",&qty6);
        printf("Order: %d ", order6);
        printf("\nPrice: %d", price[order6]);
        printf("\nQuantity: %d", qty6);
        total6= price[order6]*qty6;
        printf("\nTotal: %d", total6);}

        else if(order==6){
        order7=order;
        printf("How many order? ");
        scanf("%d",&qty7);
        printf("Order: %d ", order7);
        printf("\nPrice: %d", price[order7]);
        printf("\nQuantity: %d", qty7);
        total7= price[order7]*qty7;
        printf("\nTotal: %d", total7);}

    else if(order==7){
        order8=order;
        printf("How many order? ");
        scanf("%d",&qty8);
        printf("Order: %d ", order8);
        printf("\nPrice: %d", price[order8]);
        printf("\nQuantity: %d", qty8);
        total8= price[order8]*qty8;
        printf("\nTotal: %d", total8);}

    else if(order==8){
        order9=order;
        printf("How many order? ");
        scanf("%d",&qty9);
```

```
        printf("Order: %d ", order9);
        printf("\nPrice: %d", price[order9]);
        printf("\nQuantity: %d", qty9);
        total9= price[order9]*qty9;
        printf("\nTotal: %d", total9);}

    else if(order==9){
        order10=order;
        printf("How many order? ");
        scanf("%d",&qty10);
        printf("Order: %d ", order10);
        printf("\nPrice: %d", price[order10]);
        printf("\nQuantity: %d", qty10);
        total10= price[order10]*qty10;
        printf("\nTotal: %d", total10);}

    else if(order==10){
        order11=order;
        printf("How many order? ");
        scanf("%d",&qty11);
        printf("Order: %d ", order11);
        printf("\nPrice: %d", price[order11]);
        printf("\nQuantity: %d", qty11);
        total11= price[order11]*qty11;
        printf("\nTotal: %d", total11);}

    else if(order==11){
        order12=order;
        printf("How many order? ");
        scanf("%d",&qty12);
        printf("Order: %d ", order12);
        printf("\nPrice: %d", price[order12]);
        printf("\nQuantity: %d", qty12);
        total12= price[order12]*qty12;
        printf("\nTotal: %d", total12);}

    else if(order==12){
        order13=order;
        printf("How many order? ");
        scanf("%d",&qty13);
        printf("Order: %d ", order13);
        printf("\nPrice: %d", price[order13]);
        printf("\nQuantity: %d", qty13);
        total13= price[order13]*qty13;
        printf("\nTotal: %d", total13);}
```

```
else if(order==13){
order14=order;
printf("How many order? ");
scanf("%d",&qty14);
printf("Order: %d ", order14);
printf("\nPrice: %d", price[order14]);
printf("\nQuantity: %d", qty14);
total14= price[order14]*qty14;
printf("\nTotal: %d", total14);}

else if(order==14){
order15=order;
printf("How many order? ");
scanf("%d",&qty15);
printf("Order: %d ", order15);
printf("\nPrice: %d", price[order15]);
printf("\nQuantity: %d", qty15);
total15= price[order15]*qty15;
printf("\nTotal: %d", total15);}

else if(order==15){
order16=order;
printf("How many order? ");
scanf("%d",&qty16);
printf("Order: %d ", order16);
printf("\nPrice: %d", price[order16]);
printf("\nQuantity: %d", qty16);
total16= price[order16]*qty16;
printf("\nTotal: %d", total16);}

else if(order==16){
order17=order;
printf("How many order? ");
scanf("%d",&qty17);
printf("Order: %d ", order17);
printf("\nPrice: %d", price[order17]);
printf("\nQuantity: %d", qty17);
total17= price[order17]*qty17;
printf("\nTotal: %d", total17);}

else if(order==17){
order18=order;
printf("How many order? ");
scanf("%d",&qty18);
printf("Order: %d ", order18);
printf("\nPrice: %d", price[order18]);
```

```
        printf("\nQuantity: %d", qty4);
        total18= price[order18]*qty18;
        printf("\nTotal: %d", total18);}

        else if(order==18){
        order19=order;
        printf("How many order? ");
        scanf("%d",&qty19);
        printf("Order: %d ", order19);
        printf("\nPrice: %d", price[order19]);
        printf("\nQuantity: %d", qty19);
        total19= price[order19]*qty19;
        printf("\nTotal: %d", total19);}

        else if(order==19){
        order20=order;
        printf("How many order? ");
        scanf("%d",&qty20);
        printf("Order: %d ", order20);
        printf("\nPrice: %d", price[order20]);
        printf("\nQuantity: %d", qty20);
        total20= price[order20]*qty20;
        printf("\nTotal: %d", total20);}

   else//loop order if ever the user inputs wrong item code
   {
      printf("Your number is not found in our menu. Please select a number again.\n");
      clientorder(order);
   }
        orderagain(yn);//go to function for order again (y/n)
        }//end of function take order


        void orderagain(char yn)//function for order again
        {
        printf("\nWould you like to order again(y/n)? ");
        scanf("%s",&yn);
   if(yn=='Y'||yn=='y')
   {
                clientorder(order);//will take you back to take order function again

        }
        else if(yn=='N'||yn=='n')//records all order then proceed to: option again (but this time we
did not made it a  different function
   {
        printf("Press R-receipt, O-options, E-exit: ");
```

```
	scanf("%s",&press);
	if(press=='R'||press=='r')
	{
		receipt(orec);//go to receipt function
		}
	else if(press=='O'||press=='o')
	{
		options(opt);//go to option function
		}
	else if(press=='E'||press=='e')
	{
		exit (0);//end program
		}
	}
	else
	{
		printf("Please input y/n only");//if the user inputs none of the option
		orderagain(yn);//loop to option function again
	}
}//end of function


	void receipt(int orec)//function for receipt
	{
		printf("\n------------------------------RECEIPT----------------------------------------\n");
		printf("Order                    Quantity                    Price");
		for(ctr=0;ctr<=n;ctr++){//loop like earlier to display how many orders the user
chose. eg: the user ordered/INPUT 3x, in receipt function they will loop the PRINT 3x too
		if(order1==0 && qty1>=1)//if and else statements for diff order codes
		{
			printf("\nLipstick in Shade no. 1		%d
%d",qty1,total1);
		}
		if(order2==1 && qty2>=1)
		{
			printf("\nLipstick in Shade no. 2		%d
%d",qty2,total2);
		}
		if(order3==2 && qty3>=1)
		{
			printf("\nLipstick in Shade no. 3		%d
%d",qty3,total3);
		}
		if(order4==3 && qty4>=1)
		{
```

```
                printf("\nLipstick in Shade no. 4          %d
%d",qty4,total4);
        }
        if(order5==4 && qty5>=1)
        {
                printf("\nLipstick in Shade no. 5          %d
%d",qty5,total5);
        }
        if(order6==5 && qty6>=1)
        {
                printf("\nLipstick in Shade no. 6          %d
%d",qty6,total6);
        }
        if(order7==6 && qty7>=1)
        {
                printf("\nBrow Pencil in Taupe             %d
%d",qty7,total7);
        }
        if(order8==7 && qty8>=1)
        {
                printf("\nBrow Pencil in Brunette          %d
%d",qty8,total8);
        }
        if(order9==8 && qty9>=1)
        {
                printf("\nEyeshadow in Daytime             %d
%d",qty9,total9);
        }
        if(order10==9 && qty10>=1)
        {
                printf("\nEyeshadow in Nighttime           %d
%d",qty10,total10);
        }
        if(order11==10 && qty11>=1)
        {
                printf("\nLengthening Mascara              %d
%d",qty11,total11);
        }
        if(order12==11 && qty12>=1)
        {
                printf("\nJet Black Liner                  %d
%d",qty12,total12);
        }
        if(order13==12 && qty13>=1)
        {
```

```
                printf("\nMultipot in Shade no. 1          %d
%d",qty13,total13);
        }
        if(order14==13 && qty14>=1)
        {
                printf("\nMultipot in Shade no. 2          %d
%d",qty14,total14);
        }
        if(order15==14 && qty15>=1)
        {
                printf("\nMultipot in Shade no. 3          %d
%d",qty15,total15);
        }
        if(order16==15 && qty16>=1)
        {
                printf("\nMultipot in Shade no. 4          %d
%d",qty16,total16);
        }
        if(order17==16 && qty17>=1)
        {
                printf("\nBB Cream in Fair          %d
%d",qty17,total17);
        }
        if(order18==17 && qty18>=1)
        {
                printf("\nBB Cream in light          %d
%d",qty18,total18);
        }
        if(order19==18 && qty19>=1)
        {
                printf("\nBB Cream in medium          %d
%d",qty19,total19);
        }
        if(order20==19 && qty20>=1)
        {
                printf("\nBB Cream in dark          %d
%d",qty20,total20);
        }


    totalpay=total1+total2+total3+total4+total5+total6+total7+total8+total9+total10+total11
+total12+total13+total14+total15+total16+total17+total18+total19+total20;//computes for the
total all in all
        printf("\nTOTAL:
%d",totalpay);
        CHOICE://for go to function
```

```
		printf("\nDiscount? N-None, S-Senior, T-Others: ");//another option, this time for possible discounts
		scanf("%s",&press);
	if(press=='N'||press=='n')//meaning no discount
	{
		printf("Enter Cash: ");
		scanf("%d",&cash);
		change=cash-totalpay;//computes for change after input of cash
			if(change>=0)//if the user inputs either an exact or extra amount
		{
		printf("Change: %d",change);//prints change
		printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come again!");
		exit (0);//end program
		}
		else//if the user inputs short cash
		{
			printf("Unfortunately, you're short: Php%d", abs(change));
			printf("\nPlease add Php%d: ",abs(change));//program asks for short payment
			scanf("%d",&add);
			change=(cash+add)-totalpay;//computes for final balance
			if(change>=0)//if the additional payment is enough
		{
		printf("Change: %d",change);//print change
		printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come again!");
		exit (0);//end program
		}
		else if(change<0)//if the user gave a short amount of cash again
		{
			printf("Unfortunately you're still short");//print that they are still short in cash
			printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come again!");
			exit (0);//end program
			}
		}
		}

		else if(press=='S'||press=='s')//gives 20 percent discount in the users total
	{
		disc=totalpay*.2;
		discto=totalpay*.8;
			printf("\nDiscount: %d",disc);
		printf("\nDiscounted Total: %d",discto);
```

```
                printf("\nEnter Cash: ");
        scanf("%d",&cash);
        change = cash-discto;
        if(change>=0)//if the user inputs either an exact or extra amount
        {
        printf("Change: %d",change);//prints change
        printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come
again!");
        exit (0);//end program
        }
        else//if the user inputs short cash
        {
                printf("Unfortunately, you're short: Php%d", abs(change));
                printf("\nPlease add Php%d: ",abs(change));//program asks for short
payment
                scanf("%d",&add);
                change=(cash+add)-discto;//computes for final balance
                if(change>=0)//if the additional payment is enough
        {
        printf("Change: %d",change);//print change
        printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come
again!");
        exit (0);//end program
        }
        else if(change<0)//if the user gave a short amount of cash again
        {
                printf("Unfortunately you're still short");//print that they are still short in
cash
                printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please
come again!");
                exit (0);//end program
                }
        }
        }

        else if(press=='T'||press=='t')//gives 30 percent discount in the users total
    {
        disc = totalpay*.3;
        discto = totalpay*.7;
        printf("\nDiscount: %d",disc);
        printf("\nDiscounted Total: %d",discto);
                printf("\nEnter Cash: ");
        scanf("%d", &cash);
        change = cash-discto;
        if(change>=0)//if the user inputs either an exact or extra amount
        {
```

```
                printf("Change: %d",change);//prints change
                printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come
again!");
                exit (0);//end program
                }
                else//if the user inputs short cash
                {
                        printf("Unfortunately, you're short: Php%d", abs(change));
                        printf("\nPlease add Php%d: ",abs(change));//program asks for short
payment
                        scanf("%d",&add);
                        change=(cash+add)-discto;//computes for final balance
                        if(change>=0)//if the additional payment is enough
                        {
                printf("Change: %d",change);//print change
                printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please come
again!");
                exit (0);//end program
                        }
                else if(change<0)//if the user gave a short amount of cash again
                        {
                        printf("Unfortunately you're still short");//print that they are still short in
cash
                        printf("\nThank you for Patronizing Arcie and Rina's Boutique, Please
come again!");
                        exit (0);//end program
                                }
                }
                }

                else
                {
                printf("Please input one of the options");
                goto CHOICE;//go to function to go back to the choice options for discount
                }

        }
        }//end receipt function
```

Output Screenshots:

```
USERNAME: mascara
PASSWORD: ***
```

```
USERNAME: mascara
PASSWORD: ****
You have logged in successfully!

Hi, Welcome to Arcie and Rina's Boutique!
Here is our list of items.
                                MENU

----------------------------------LIPS-----------------------------------------
00. Lipstick in Shade no. 1  Php300     03. Lipstick in Shade no. 4  Php300
01. Lipstick in Shade no. 2  Php300     04. Lipstick in Shade no. 5  Php300
02. Lipstick in Shade no. 3  Php300     05. Lipstick in Shade no. 6  Php300

---------------------------------EYES------------------------------------------
06. Brow Pencil in Taupe  Php200        09. Eyeshadow in Nighttime  Php600
07. Brow Pencil in Brunette  Php200     10. Lengthening Mascara Php350
08. Eyeshadow in Daytime  Php600        11. Jet Black Eyeliner  Php300

---------------------------------FACE------------------------------------------
12. Multipot in Shade no. 1  Php350     16. BB Cream in Fair  Php450
13. Multipot in Shade no. 2  Php350     17. BB Cream in Light  Php450
14. Multipot in Shade no. 3  Php350     18. BB Cream in Medium  Php450
15. Multipot in Shade no.4  Php350      19. BB Cream in Dark  Php450

Press any key to continue.
```

```
USERNAME: mascara
PASSWORD: ****
You have logged in successfully!

Hi, Welcome to Arcie and Rina's Boutique!
Here is our list of items.
                                MENU

----------------------------------LIPS-----------------------------------------
00. Lipstick in Shade no. 1  Php300     03. Lipstick in Shade no. 4  Php300
01. Lipstick in Shade no. 2  Php300     04. Lipstick in Shade no. 5  Php300
02. Lipstick in Shade no. 3  Php300     05. Lipstick in Shade no. 6  Php300

----------------------------------EYES-----------------------------------------
06. Brow Pencil in Taupe  Php200        09. Eyeshadow in Nighttime  Php600
07. Brow Pencil in Brunette  Php200     10. Lengthening Mascara Php350
08. Eyeshadow in Daytime  Php600        11. Jet Black Eyeliner  Php300

----------------------------------FACE-----------------------------------------
12. Multipot in Shade no. 1  Php350     16. BB Cream in Fair  Php450
13. Multipot in Shade no. 2  Php350     17. BB Cream in Light  Php450
14. Multipot in Shade no. 3  Php350     18. BB Cream in Medium  Php450
15. Multipot in Shade no.4  Php350      19. BB Cream in Dark  Php450

Press any key to continue.
-------------------------------OPTIONS-----------------------------------------
A. Menu
B. Order
C. Exit

Please choose a letter: _
```

```
----------------------------------LIPS-----------------------------------------
00. Lipstick in Shade no. 1  Php300     03. Lipstick in Shade no. 4  Php300
01. Lipstick in Shade no. 2  Php300     04. Lipstick in Shade no. 5  Php300
02. Lipstick in Shade no. 3  Php300     05. Lipstick in Shade no. 6  Php300

----------------------------------EYES-----------------------------------------
06. Brow Pencil in Taupe  Php200        09. Eyeshadow in Nighttime  Php600
07. Brow Pencil in Brunette  Php200     10. Lengthening Mascara Php350
08. Eyeshadow in Daytime  Php600        11. Jet Black Eyeliner  Php300

----------------------------------FACE-----------------------------------------
12. Multipot in Shade no. 1  Php350     16. BB Cream in Fair  Php450
13. Multipot in Shade no. 2  Php350     17. BB Cream in Light  Php450
14. Multipot in Shade no. 3  Php350     18. BB Cream in Medium  Php450
15. Multipot in Shade no.4  Php350      19. BB Cream in Dark  Php450

Press any key to continue.
-------------------------------OPTIONS-----------------------------------------
A. Menu
B. Order
C. Exit

Please choose a letter: B


-----------------------------TAKE ORDER----------------------------------------

What is your order number?
```

```
--------------------------------OPTIONS----------------------------------------
A. Menu
B. Order
C. Exit

Please choose a letter: B


------------------------------TAKE ORDER-----------------------------------------

What is your order number? 4
How many order? 2
Order: 4
Price: 300
Quantity: 2
Total: 600
Would you like to order again(y/n)? Y
What is your order number? 15
How many order? 4
Order: 15
Price: 350
Quantity: 4
Total: 1400
Would you like to order again(y/n)? Y
What is your order number? 8
How many order? 1
Order: 8
Price: 600
Quantity: 1
Total: 600
Would you like to order again(y/n)? N
Press R-receipt, O-options, E-exit:
```

```
------------------------------TAKE ORDER---------------------------------------

What is your order number? 4
How many order? 2
Order: 4
Price: 300
Quantity: 2
Total: 600
Would you like to order again(y/n)? Y
What is your order number? 15
How many order? 4
Order: 15
Price: 350
Quantity: 4
Total: 1400
Would you like to order again(y/n)? Y
What is your order number? 8
How many order? 1
Order: 8
Price: 600
Quantity: 1
Total: 600
Would you like to order again(y/n)? N
Press R-receipt, O-options, E-exit: R

------------------------------RECEIPT-------------------------------------------
Order                        Quantity                    Price
Lipstick in Shade no. 5         2                         600
Eyeshadow in Daytime            1                         600
Multipot in Shade no. 4         4                         1400
TOTAL:                                                    2600
Discount? N-None, S-Senior, T-Others:
```

```
What is your order number? 15
How many order? 4
Order: 15
Price: 350
Quantity: 4
Total: 1400
Would you like to order again(y/n)? Y
What is your order number? 8
How many order? 1
Order: 8
Price: 600
Quantity: 1
Total: 600
Would you like to order again(y/n)? N
Press R-receipt, O-options, E-exit: R

------------------------------RECEIPT----------------------------------------
Order                         Quantity                    Price
Lipstick in Shade no. 5          2                         600
Eyeshadow in Daytime             1                         600
Multipot in Shade no. 4          4                         1400
TOTAL:                                                     2600
Discount? N-None, S-Senior, T-Others: S

Discount: 520
Discounted Total: 2080
Enter Cash: 3000
Change: 920
Thank you for Patronizing Arcie and Rina's Boutique, Please come again!
-------------------------------
Process exited after 105.9 seconds with return value 0
Press any key to continue . . .
```