

final lab project

WAFFLE &
PANCAKE STORE
SYSTEM

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THE ROLE OF EACH STUDENT IN THE PROJECT

STUDENT NAME	TASK
ABEER ALMALAWI	Definig variables, reviewing code and output
MARAM ALHARTHI	Reading and writing data, loop and conditional jump (Waffle)
MOUDI ALHAZZAA	Reading and writing data, loop and conditional jump (Pancake)
RAGHAD BIN ALI	The bill and all calculations such as: Tax, Discount (Floating point instruction)

DEFINING THE PROJECT

WAFFLE & PANCAKE STORE SYSTEM

It will allow the users to buy special kinds of sweets (Waffle& Pancake). It also allows the users to add extra sauces (such as chocolate sauce and caramel sauce) . Toppings (such as strawberry, and banana). The users have to enter the number of pieces they want. The cost of the order is based on the type of sweet (pancake or waffle). And the extra sauces or toppings.



DESCRIPTION OF CODE

In the beginning we have several labels including Choices, sauces and Toppings, since our program depends on the user's choice, we created a menu containing 3 Choices, 1 waffle, 2 pancakes, and 3 exit, at first, we defined all the variables in the data part, and in order to display The Choices we called (Choices) and to read what the user entered we used li \$v0, 5 “read integer” if he chose 1 it will go to if label and here we used if condition and in the label we used li la \$a0, msg to display the message and li \$v0,4 to print the message “string” then the user will enter The number of pieces he wants, then we will use bne \$t0,1, else1. If the Choices is not 1 he will go to else1 “which is the pancake” and if 1 he will complete the code and go to if1 and here we calculated the total by multiplying the price by the number of pieces using mul.d, while the user asked More than five pieces will have the value of the discount calculated through div.d, then the list of sauces will appear to the user. Here we used the opinion and there are five options (chocolate sauce, honey sauce, caramel sauce, pistatio sauce, no sauce) and using the sauce label, the sauces will be displayed and the option is read from user Also, by calling the Topping label, will be displayed Topping and also through li \$v0, 5 the user Choices will be read and then the tax, discount and total will be displayed in the bill ..

Examples of the instructions used in our system :

1- la 2- li 3- lw 4- j 5- jr 6- l.d
7- mtc1 8- cvt.d.w 9- bc1t 10- beq
11- c.eq.d 12- bne 13- ble 14- bgt
15- add.d 16- mul.d 17- div.d 18- sub.d

INPUT VALIDATION :

The user has to enter 1 for Waffle. 2 for pancake. or 3 for exiting from the program. You have to check the Input validation for all Entries.

1) If the user enters the wrong input in the main menu then the program will display " Sorry! wrong input.

Try Again (Y I N)? ", and allow the user to re-enter the input.

2) If the user input is not recognized, in the Sauces and Toppings menu. then the program will display "Sorry ! Wrong Input, Exiting the program ".

3) You have to check the entered information with the corresponding requirements according to the data mentioned in the tables below:

SWEET TYPE	PRICE FOR ONEPIECE	TAX	DISCOUNT
WAFFLE	10 SR	15%	10% FOR THE TOTAL IF PIECE > 5
PANCAKE	5 SR	15%	10% FOR THE TOTAL IF PIECE > 10



THE FOLLOWING TABLE SHOW THE SAUCES AND TOPPING INFORMATION:

ADDING TYPE		PRICE
SAUCES	PISTACHIO	2 SR
	CARAMEL	2 SR
	HONEY	2 SR
	CHOCOLATE	2 SR
TOPPING	STRAWBERRY	5 SR
	BANANA	5 SR
	NUTS	5 SR

SCREENSHOTS OF AN EXAMPLE OF THE OUTPUT OF THE PROGRAM

EXAMPLE 1

```
Console
-----
Welcome to Waffle&Pancake Sweets System
-----
Enter your name: Aamal
1. for Waffles
2. for pancakes
3. for Exit program
Enter your choice: 2
Enter the number of Pieces: 25
-----
Choose the Souaces
-----
1. CHOCOLATE SOUACE
2. HONEY SOUACE
3. CRAMEL SOUACE
4. PISTATIO SOUACE
5. No Souace
Enter the Choice No: 1
-----
Choose the Toppings
-----
1. STRAWBERRY
2. BANANA
3. NUTS
4. No Addings
Enter the Choice No: 3
-----
The Bill
-----
Sweet Type : Pancakes      Number of pieces : 25
Souace : chocolate souace      Topping : Nuts
Discount: 10%          Tax: 15%
Total Price: 138.59999999999999 SR
```

EXAMPLE 2

```
[100000          Welcome to Waffle&Pancake Sweets System
[100100
[100100
[100100 Enter your name: mohammed
[100100 1. for Waffles
[100100 2. for pancakes
[100100 3. for Exit program
[100100 Enter your choice: 1
[100100 Enter the number of Pieces: 5
[100100
[100100 Choose the Souaces
[100100
[100100
[100100 1. CHOCOLATE SOUACE
[100100 2. HONEY SOUACE
[100100 3. CRAMEL SOUACE
[100100 4. PISTATIO SOUACE
[100100 5. No Souace
[100100 Enter the Choice No: 5
[100101
[100101 Choose the Toppings
[100101
[100101
[100101 1. STRAWBRRY
[100101 2. BANANA
[100101 3. NUTS
[100101 4. No Addings
[100101 Enter the Choice No: 4
[100101
[100101 The Bill
[100101
[100101
[100101 Sweet Type : Waffles      Number of pieces : 5
[100101 Souace : No Addings      Topping : No Addings
[100101 Discount: 0%            Tax: 15%
[100101 Total Price: 57.5 SR
```

EXAMPLE 3

```
00-----  
00-----  
00      Welcome to Waffle&Pancake Sweets System  
00-----  
00-----  
00 Enter your name: rama  
00 1. for Waffles  
00 2. for pancakes  
00 3. for Exit program  
00 Enter your choice: 3  
00 Program ended, Thank you !  
00  
00  
00  
00  
00  
00  
00  
00  
00  
01  
01
```

EXAMPLE 4

```
Console
-----
Welcome to Waffle&Pancake Sweets System
-----
Enter your name: yara
1. for Waffles
2. for pancakes
3. for Exit program
Enter your choice: 5
Sorry ! wrong input
Try again(Y/N)
Y
-----
Welcome to Waffle&Pancake Sweets System
-----
Enter your name: yara
1. for Waffles
2. for pancakes
3. for Exit program
Enter your choice: 3
Program ended, Thank you !
-----
1 o o s
3 . . 1
5 O U A
5 O U A
S O U
I O
S o u
C h o
```

EXAMPLE 5

```
Console
-----
Welcome to Waffle&Pancake Sweets System
-----
Enter your name: amal
1. for Waffles
2. for pancakes
3. for Exit program
Enter your choice: 5
Sorry ! wrong input
Try again(Y/N)
N
Program ended, Thank you !

```