

PRACTICAL REPORT
ALGORITHM PROGRAMMING

Week 4



Group 1

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2024

TASK :

- Make a Pizza Ordering Program Using Python
- Create a Flowchart that Simplified the Program
- Create a Report and an Even in Depth Explanation of the Program.

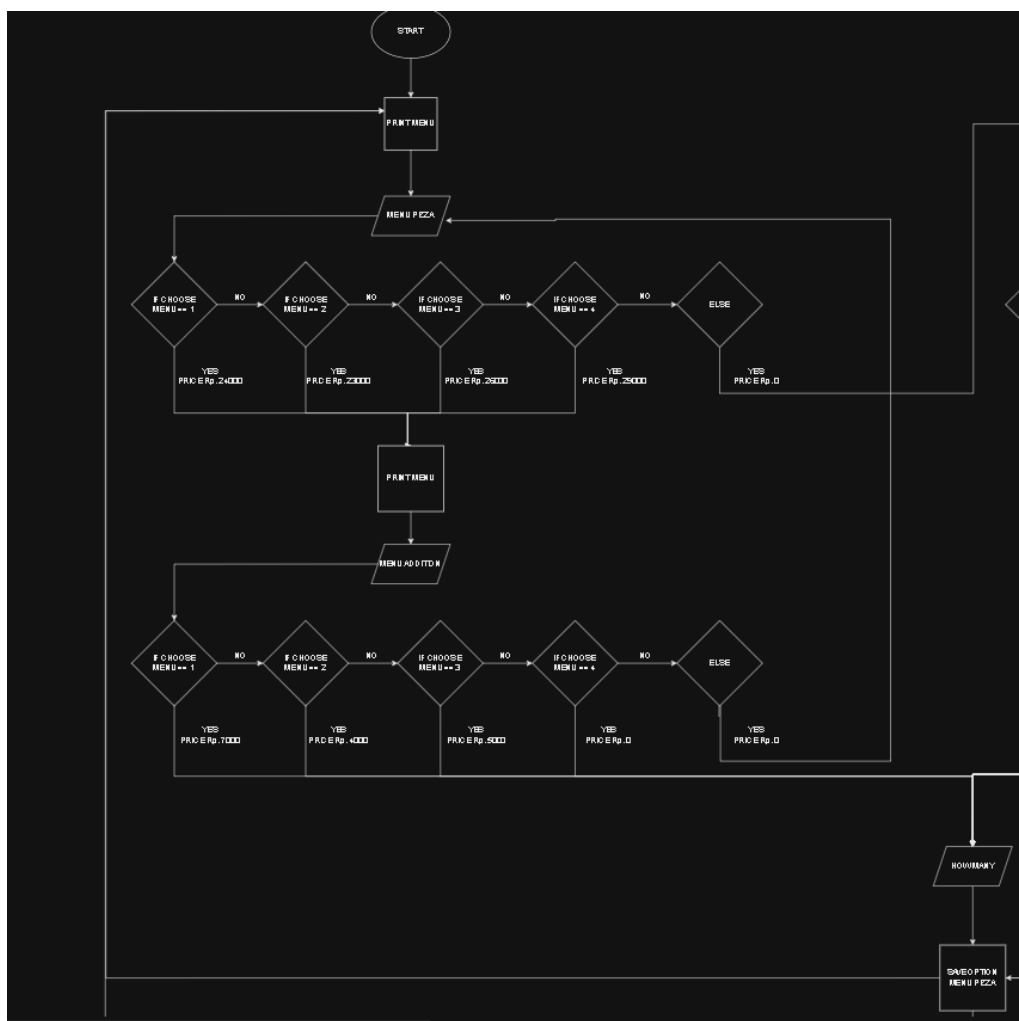
A. FLOWCHART

The flowchart and it's function can be divided into four chunks.

- Pizza ordering
- Side ordering
- Drink ordering
- Receipt

Those chunks work in accordance to the following

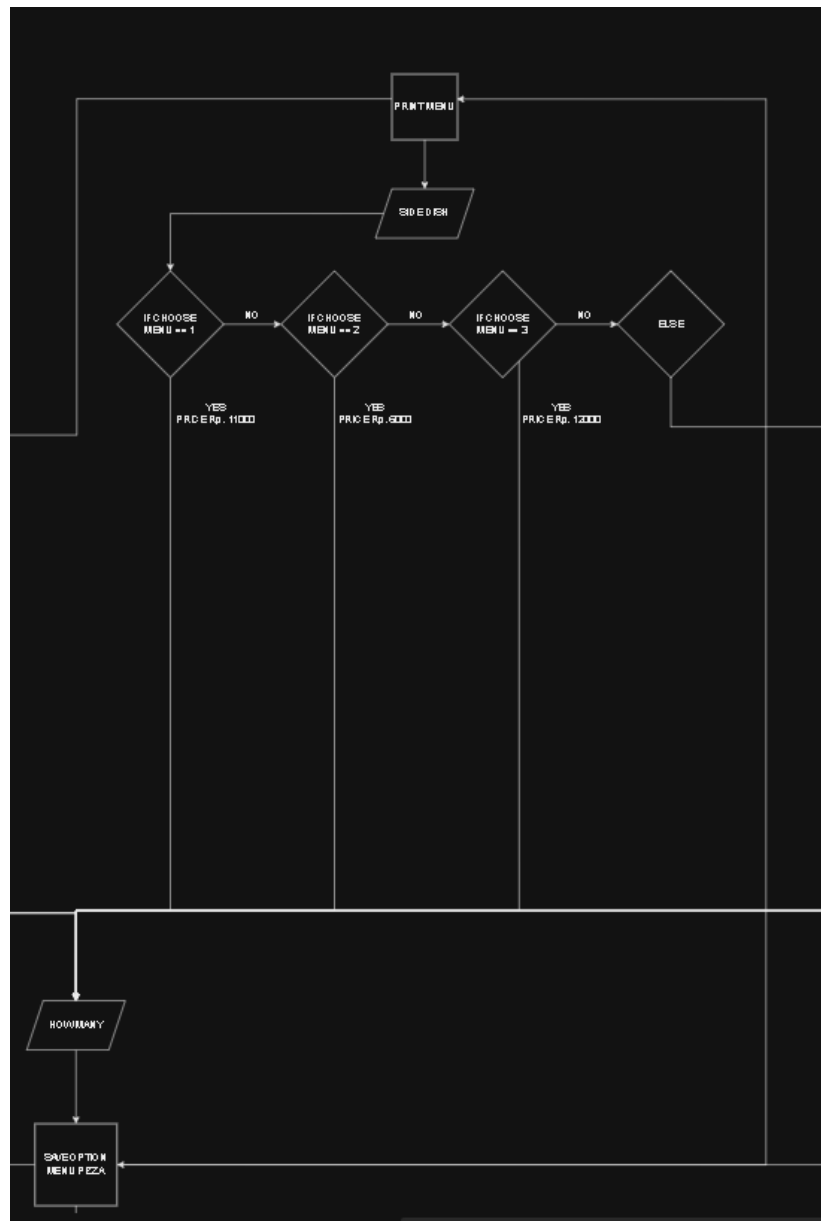
a. Pizza Ordering



1.1. Pizza menu flowchart

1. Start the program,
2. Print the pizza menu,
3. Ask for user input,
4. If input is in accordance to the menu continue to the extra topping,
 *Else continue to the next chunk of the program,
5. Print the extra topping menu,
6. Ask for extra topping input,
7. If input in accordance to the menu ask how many of those do they wish to order,
 *Else return to the previous pizza menu
8. Count the prizes of those and saved it
9. Return back to Pizza menu

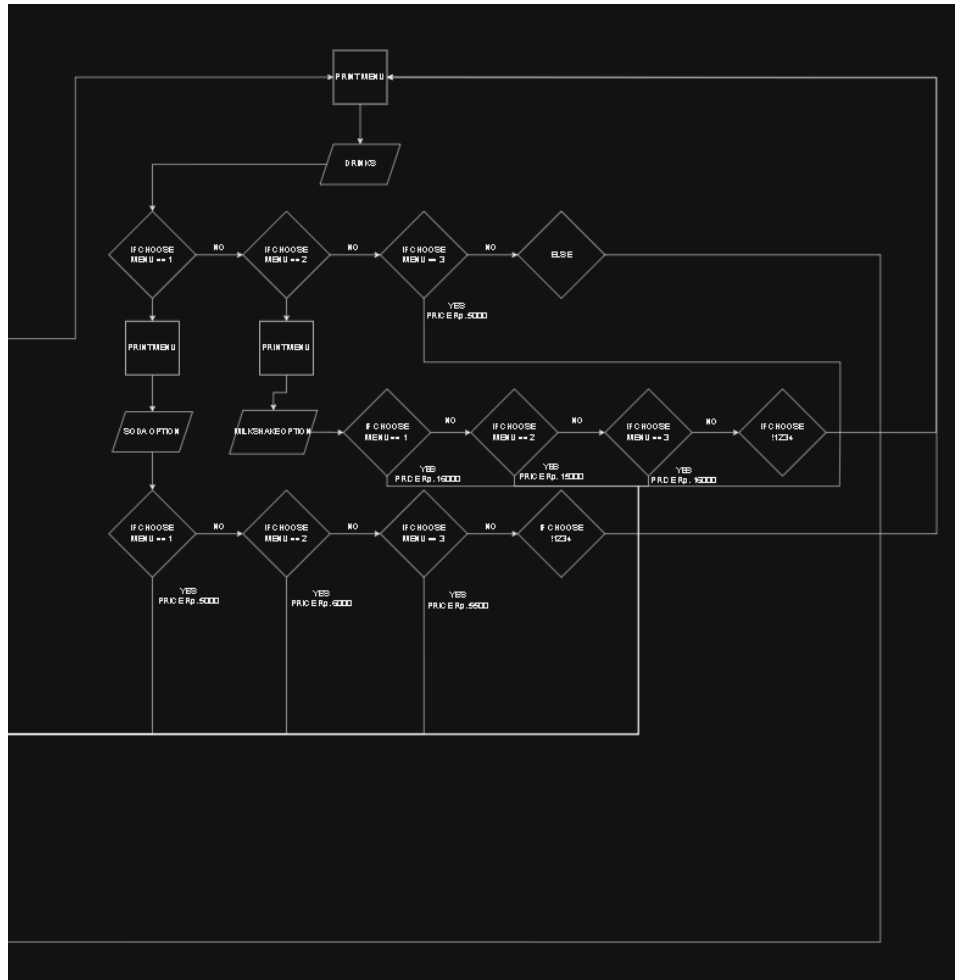
b. Side Ordering



1.2. Side dish menu flowchart

1. Start by inputting unrecognized input on pizza menu,
2. Print side dish menu,
3. Ask for user's input,
4. If input matches the menu, ask how many of the item they want,
*Else continue to drink menu,
5. Count how many of those items along with their total price and save them,
6. Return back to side dish menu.

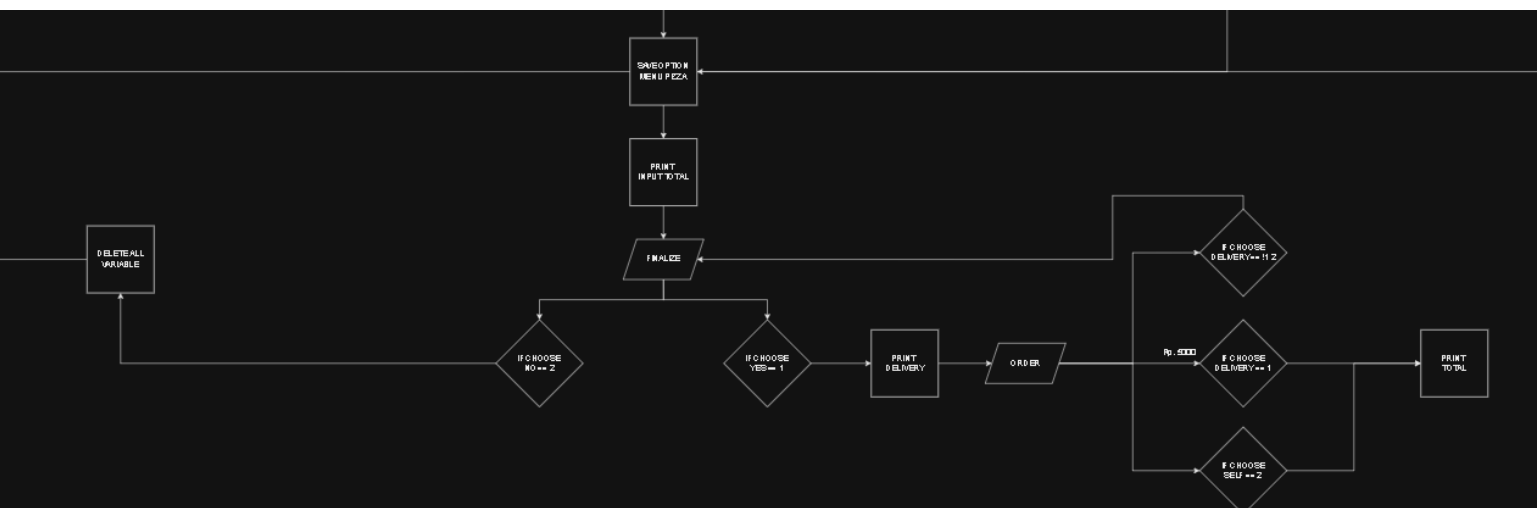
c. Drink ordering



1.3. Drink menu flowchart

1. Start by putting wrong input on side dish menu,
2. Print drink menu,
3. Ask for user input,
4. If input match requirement print a sub menu in accordance to the input or skip to asking how many,
*Else went to the receipt menu,
5. Ask how many of items do you order,
6. Count and saved the price of the ordered item,
7. Return to drink menu.

d. Receipt menu



1.4. Receipt flowchart

1. Start by putting unassigned input on drink menu ,
2. Print total prize the users order,
3. Ask if they want to reorder or not,
4. If yes then delete all value and go back to pizza menu,
 *Else print if they want delivery or not,
5. Ask input if they want delivery,
6. If yes add delivery fee to total,
 *Else if don't add delivery fee,
 *Else return them to the receipt interface,
7. Print the total cost and said good bye.

B. CODE OVERVIEW

- Inside a Function

```
1 def pizza_ordering_system():
```

2.1. Pizza function

Every single bit off the code is being put inside a function. The reason for that is so that later on down the lines we able to rerun the program for our reorder system.

- Establishing Variable

```

2     pepper_count = 0
3     pepper_stuffed_count = 0
4     pepper_cheese_count = 0
5     pepper_top_count = 0
6     cheese_count = 0
7     cheese_stuffed_count = 0
8     cheese_cheese_count = 0
9     cheese_top_count = 0
10    pine_count = 0
11    pine_stuffed_count = 0
12    pine_cheese_count = 0
13    pine_top_count = 0
14    meat_count = 0
15    meat_stuffed_count = 0
16    meat_cheese_count = 0
17    meat_top_count = 0
18    bread_count = 0
19    soup_count = 0
20    french_count = 0
21    coca_count = 0
22    teb_count = 0
23    pop_count = 0
24    choco_count = 0
25    van_count = 0
26    str_count = 0
27    wat_count = 0
28    pepper_cost = 0
29    pepper_stuffed_cost = 0
30    pepper_cheese_cost = 0
31    pepper_top_cost = 0
32    cheese_cost = 0
33    cheese_stuffed_cost = 0
34    cheese_cheese_cost = 0
35    cheese_top_cost = 0
36    pine_cost = 0
37    pine_stuffed_cost = 0
38    pine_cheese_cost = 0
39    pine_top_cost = 0
40    meat_cost = 0
41    meat_stuffed_cost = 0
42    meat_cheese_cost = 0
43    meat_top_cost = 0

```

2.2. Establishing and resetting the value of variable

There's multitude of reason why this entire block from line 2 to 53 is here. Firstly it's to establish all variable inside the code. Second and somewhat more importantly it reset all variable listed above to zero which help the program to run it back for our reorder system.

- The while loop

```

56     keep_looping = 1
57
58     while keep_looping == 1:
59         print ("Which pizza would you like to order today?")

```

2.3. Establish "keep_looping" and a while loop of the menu

Inside the code exist a variable called "keep_looping", the point of this variable is to make sure the customer fully ordered everything in the current menu before continuing to the next menu. Let's use the up incoming side dish menu as examples.

```

Additional side dish?
1) Bread stick      :Rp. 11000
2) Soup             :Rp. 6000
3) French Fries     :Rp. 12000
-) Next
Order :1

Total Ordered = 0
How many? :1

Additional side dish?
1) Bread stick      :Rp. 11000
2) Soup             :Rp. 6000
3) French Fries     :Rp. 12000
-) Next
Order :

```

2.4. Example of menu looping back

After entering, ordering, and putting the amount want, instead of the code bleed into the next menu and keep continuing, we make it so it repeat the current menu just so if the user want another menu item or even repick menu item if the amount isn't in accordance to what they want.

```

Additional side dish?
1) Bread stick      :Rp. 11000
2) Soup             :Rp. 6000
3) French Fries     :Rp. 12000
-) Next
Order :0

Additional drinks?
1) Soda             :(...)
2) Milkshake         :(...)
3) Water Bottle      :Rp. 5000
-) Next
Order :|

```

2.5. Example of menu continuing

The only way to escape the loop is by inputting unassigned value (in this case the input being 0) and by doing that the program will continue and run the next lines of code.

```

145     else:
146         keep_looping = 2
147

```

2.6. Changing “keep_looping ” to 2 and deactivating the loop

The reason why it work is because established earlier in images 2.3 that there's a while loop with condition of it deactivating being if “keep_looping” is any other value other than 1. So by just changing that value for unassigned interger value to something other than 1 (let's say 2), it will break the loop and continue to the next lines, and when the next menu come around “keep_looping” value is reverted back just like in images 2.3 and the cycle continue. This is essentially how every menu (Pizza menu, Side dish menu, Drink menu, even the Receipt) work.

- Pizza Menu


```

56     keep_looping = 1
57
58     while keep_looping == 1:
59         print ("Which pizza would you like to order today?")
60         print(*1) Pepperoni Pizza      :Rp. 24000")
61         print(*2) Cheese Pizza        :Rp. 23000")
62         print(*3) Hawaiian Pizza      :Rp. 26000")
63         print(*4) Meat Pizza          :Rp. 29000")
64         print("-) Next")
65         pizza_order=int(input("Order :"))
66         print("")
67

```

2.7. The beginning part of pizza menu

Almost all of the beginning part of the menu of code began identically with the following lines of code.

- Changing a “keep_looping” variable back to 1,
- Establishing the while loop of the menu with the lock being “keep_looping”,
- Printing the entirety of the menu,
- An input where the user able to order something,
- An empty print function to make the print in command prompt less cluttered,
- And continuing to next menu via inputting an unassigned value into the input function.

However each menu have their own different quirk that makes them different.

```

68         if 1 <= pizza_order <= 4 :
69             print("Any addition?")
70             print(*1) Stuffed Crust      :+ Rp. 7000")
71             print(*2) Extra Cheese      :+ Rp. 4000")
72             print(*3) Extra Topping     :+ Rp. 5000")
73             print(*4) No Addition       :+ Rp. 0")
74             print("-) Return")
75             pizza_topping = int(input("Order :"))
76             print("")
77

```

2.8. The topping menu directly under the pizza menu

With the unique factor for pizza menu is it contains a secondary menu that if you pick an assigned value will lead you to be asked as to the additional topping you want on top of your pizza. After this there are two things that could happened.

```

78         if pizza_order == 1 and pizza_topping == 1:
79             print(f"Total Ordered = {pepper_stuffed_count} ")
80             pepper_stuffed_count = int(input("How many? :"))
81             print("")
82         elif pizza_order == 1 and pizza_topping == 2:
83             print(f"Total Ordered = {pepper_cheese_count} ")
84             pepper_cheese_count = int(input("How many? :"))
85             print("")
86         elif pizza_order == 1 and pizza_topping == 3:
87             print(f"Total Ordered = {pepper_top_count} ")
88             pepper_top_count = int(input("How many? :"))
89             print("")
90         elif pizza_order == 1 and pizza_topping == 4:
91             print(f"Total Ordered = {pepper_count} ")
92             pepper_count = int(input("How many? :"))
93             print("")
94         elif pizza_order == 2 and pizza_topping == 1:
95             print(f"Total Ordered = {cheese_stuffed_count} ")
96             cheese_stuffed_count = int(input("How many? :"))
97             print("")

```

2.9. Second input for the amount of the ordered combination

Either you will be asked how many of the combination of pizza and the extra addition do you want to order using another input function.

```
else:
    keep_looping = 1
```

2.10. Reestablishment of “keep_looping”

Or users will return back to the main pizza menu since the variable “keep_looping” still at 1, and without that being changed into something else it will return you back to the main pizza menu.

- Sidedish Menu

```
147     keep_looping = 1
148
149     while keep_looping == 1:
150         print("Additional side dish?")
151         print("(1) Bread stick      :Rp. 11000")
152         print("(2) Soup            :Rp. 6000")
153         print("(3) French Fries    :Rp. 12000")
154         print("-) Next")
155         side_order=int(input("Order :"))
156         print("")
157
```

2.11. The “begining” of sidedish menu

After you input an unassigned value on the pizza menu you will continue to the sidedish menu. The uniqueness of this menu is that there’s nothing unique.

```
149     while keep_looping == 1:
150         print("Additional side dish?")
151         print("(1) Bread stick      :Rp. 11000")
152         print("(2) Soup            :Rp. 6000")
153         print("(3) French Fries    :Rp. 12000")
154         print("-) Next")
155         side_order=int(input("Order :"))
156         print("")
157
158         if side_order == 1:
159             print(f"Total Ordered = {bread_count} ")
160             bread_count = int(input("How many? :"))
161             print("")
162         elif side_order == 2:
163             print(f"Total Ordered = {soup_count} ")
164             soup_count = int(input("How many? :"))
165             print("")
166         elif side_order == 3:
167             print(f"Total Ordered = {french_count} ")
168             french_count = int(input("How many? :"))
169             print("")
170         else:
171             keep_looping = 2
172
```

2.12. The entirety of sidedish menu code

After inputting an assigned value you will be asked how many of the items you want using an input function and after that back to the menu you go. There’s nothing inherently spesial about this outside of maybe the while loop that in this context isn’t even spesial. Which after inputting unassigned value will lead you to the next menu.

- Drink Menu

```

173     keep_looping = 1
174
175     while keep_looping == 1:
176         print("Additional drinks?")
177         print("1) Soda                :(...)" )
178         print("2) Milkshake           :(...)" )
179         print("3) Water Bottle        :Rp. 5000")
180         print("-) Next")
181         drink_order=int(input("Order :"))
182         print("")
183

```

2.13. Beggining part of the drink menu

After inputting unassigned value on the sidedish menu will lead you to the drink menu.

```

184         if drink_order == 1:
185             print("Which soda do you want?")
186             print("1) Coca-Cola        :Rp. 5000")
187             print("2) Teb              :Rp. 6000")
188             print("3) Pepsi            :Rp. 5500")
189             print("-) Return")
190             soda_order=int(input("Order :"))
191             print("")
192
193             if soda_order == 1:
194                 print(f"Total Ordered = {coca_count} ")
195                 coca_count = int(input("How many? :"))
196                 print("")
197             elif soda_order == 2:
198                 print(f"Total Ordered = {teb_count} ")
199                 teb_count = int(input("How many? :"))
200                 print("")
201             elif soda_order == 3:
202                 print(f"Total Ordered = {pop_count} ")
203                 pop_count = int(input("How many? :"))
204                 print("")
205             else:
206                 keep_looping = 1
207
208         elif drink_order == 2:
209             print("Which milkshake do you want?")
210             print("1) Chocolate Milkshake   :Rp. 16000")
211             print("2) Vanilla Milkshake       :Rp. 15000")
212             print("3) Strawberry Milkshake    :Rp. 16000")
213             print("-) Return")
214             milkshake_order=int(input("Order :"))
215             print("")
216
217             if milkshake_order == 1:
218                 print(f"Total Ordered = {choco_count} ")
219                 choco_count = int(input("How many? :"))
220                 print("")
221             elif milkshake_order == 2:
222                 print(f"Total Ordered = {van_count} ")
223                 van_count = int(input("How many? :"))
224                 print("")
225             elif milkshake_order == 3:
226                 print(f"Total Ordered = {str_count} ")
227                 str_count = int(input("How many? :"))
228                 print("")
229             else:
230                 keep_looping = 1
231

```

2.14. The two submenu code inside the drink menu

After inputting value that assigned with the “(...)” menu it will put you through a submenu just like the pizza menu. However unlike the pizza menu where the submenu is universal and every single one of the assigned input lead you there, in drink menu each one of the value that was assigned with a submenu lead you to their own submenu, each with their own unique menu and option. After which you can pick how many drinks inside the submenu using the assigned value on their menu or return to the main drink menu by inputting unassigned value to the input function.

```

232 elif drink_order == 3:
233     print(f"Total Ordered = {wat_count} ")
234     wat_count = int(input("How many? :"))
235     print("")
236

```

2.15. The other drink “menu” without a submenu

However if you input an assigned value with no submenu in the main drink menu it will lead you to the usual how many question and loop back to the main drink menu and will continue until you input unassigned value in which case you will be lead into the next menu.

- Receipt

```

240 keep_looping = 1
241
242 while keep_looping == 1:
243     print("Here's your order :")
244     if pepper_count > 0:
245         pepper_cost = 24000 * pepper_count
246         print(f"Pepperoni Pizza ({pepper_count}) :Rp. {pepper_cost}")
247     if pepper_stuffed_count > 0:
248         pepper_stuffed_cost = (24000 + 7000) * pepper_stuffed_count
249         print(f"Pepperoni Pizza [Stuffed Crust] ({pepper_stuffed_count}) :Rp. {pepper_stuffed_cost}")
250     if pepper_cheese_count > 0:
251         pepper_cheese_cost = (24000 + 4000) * pepper_cheese_count
252         print(f"Pepperoni Pizza [Extra Cheese] ({pepper_cheese_count}) :Rp. {pepper_cheese_cost}")
253     if pepper_top_count > 0:
254         pepper_top_cost = (24000 + 4000) * pepper_top_count
255         print(f"Pepperoni Pizza [Extra Topping] ({pepper_top_count}) :Rp. {pepper_top_cost}")
256
257     if cheese_count > 0:
258         cheese_cost = 23000 * cheese_count
259         print(f"Cheese Pizza ({cheese_count}) :Rp. {cheese_cost}")
260     if cheese_stuffed_count > 0:

```

=====

```

322     if str_count > 0:
323         str_cost = 16000 * str_count
324         print(f"Strawberry Milkshake          ({str_count}) :Rp. {str_cost}")
325
326     if wat_count > 0:
327         wat_cost = 5500 * wat_count
328         print(f"Water Bottle                ({wat_count}) :Rp. {wat_cost}")
329
330     print("-----+")
331     total_cost = pepper_cost + pepper_stuffed_cost + pepper_cheese_cost + pepper_top_cost + cheese_cost + cheese_stu
332     print(f"Total                          :Rp. {total_cost}")
333     print("")
334     print("Would this be your order?")
335     print("1) Yes, that will be all.")
336     print("2) I want to change my order.")
337     finalize_order = int(input("Finalize :"))
338     print("")
339

```

2.16. The beginning part of receipt

After inputting unassigned value in the drink menu users will be lead here to the receipt. There's a lot going on, so here's a tldr of everything from top to bottom.

- Establishing "keep_looping" to 1 for later purpose,
- Establishing also the while loop for again later purpose,
- Checking the order being made and calculate the price of them,
- Printing them to show the amount of individual item being bought along with the price,
- A "_" train to separate the menu order from the rest of the print,
- Calculation of the total item bought,
- Printing the total cost of the order,
- Printing the message if users want to reorder or not,
- Asking user input of users about the discussed topic,
- Blank print so that it look neat.

After all of that you will be given another option whether you want to reorder or finalize the buy.

```

340     if finalize_order == 1:
341         print(f"Would you like delivery?")
342         print("1) Delivery                      :+ Rp. 5000")
343         print("2) Self Pick Up                      :+ Rp. 0")
344         print("-) Return")
345         delivery_order = int(input("Order :"))
346         print("")
347

```

2.17. Submenu after inputting assigned value "1" in receipt for delivery option

If you input to finalize your order you will be asked for delivery option.

```

348     if delivery_order == 1:
349         print("With delivery your total will be")
350         total_cost = total_cost + 5000
351         print(f"Rp. {total_cost}")
352         print("Thank you for your purchase and have a great meal and a 'pon' day.")
353         exit()
354

```

2.18. An exit command for the delivery option

If you pressed assigned value “1” you will be greeted with additional cost to the total cost and more importantly an exit from the “pizza_ordering_system” function we’re in.

```
355         elif delivery_order == 2:
356             print("With self pick up your total will be")
357             print(f"Rp. {total_cost}")
358             print("We'll wait at location, thank you, and have a 'pon' day.")
359             exit()
360
```

2.19. An exit command for self pickup option

Else if you pressed the second assigned value you will just be given your regular total with no addition.

And if you pick an unassigned value because of the while loop being established earlier the receipt will be reprinted and you will be allowed to pick the second option outside of finalize. This is also what happened if you pick unassigned value on the “finalize_order” input.

```
361         elif finalize_order == 2:
362             print("Alright please re-order from the beginning.")
363             print("")
364
365             pizza_ordering_system()
366
```

2.20. The reorder system.

If you pick the second assigned value you will go to the reorder system, which is putting you back all the way to the pizza menu with all your order resetted. This is the reason why the program is inside a function, so that it will be easier to loop it from the very end to the very beginning.

- Starting the Function

```
374 print("Welcome to Mama Pon Online Services, where happiness and fun transverse through cyber space.")
375
376 pizza_ordering_system()
```

2.21. The call for the function

In the very bottom after everything has been defined and clean out just remain the function call, along with the greeting print for the first time running up the program. Nothing more can be said.

C. CONCLUSION

For the most part the code has been optimized as much as for it still make sense as a part of “if and else” lecture. There’s definitely some place to optimize it, like the pizza order having to many variable maybe could be shortened using true or false, and a different way to rerun the code outside of putting everything inside a function and rerunning the function, etc. However for just a couple week of lecture this code is more than satisfied our curious need for exploring the world of coding and we will wait for the next step for an even optimized code and program.

D. RAW CODES


```
1  def pizza_ordering_system():
2      pepper_count = 0
3      pepper_stuffed_count = 0
4      pepper_cheese_count = 0
5      pepper_top_count = 0
6      cheese_count = 0
7      cheese_stuffed_count = 0
8      cheese_cheese_count = 0
9      cheese_top_count = 0
10     pine_count = 0
11     pine_stuffed_count = 0
12     pine_cheese_count = 0
13     pine_top_count = 0
14     meat_count = 0
15     meat_stuffed_count = 0
16     meat_cheese_count = 0
17     meat_top_count = 0
18     bread_count = 0
19     soup_count = 0
20     french_count = 0
21     coca_count = 0
22     teb_count = 0
23     pop_count = 0
24     choco_count = 0
25     van_count = 0
26     str_count = 0
27     wat_count = 0
28     pepper_cost = 0
29     pepper_stuffed_cost = 0
30     pepper_cheese_cost = 0
31     pepper_top_cost = 0
32     cheese_cost = 0
33     cheese_stuffed_cost = 0
34     cheese_cheese_cost = 0
35     cheese_top_cost = 0
36     pine_cost = 0
37     pine_stuffed_cost = 0
38     pine_cheese_cost = 0
39     pine_top_cost = 0
40     meat_cost = 0
41     meat_stuffed_cost = 0
42     meat_cheese_cost = 0
43     meat_top_cost = 0
```

```

44     bread_cost = 0
45     soup_cost = 0
46     french_cost = 0
47     coca_cost = 0
48     teb_cost = 0
49     pop_cost = 0
50     choco_cost = 0
51     van_cost = 0
52     str_cost = 0
53     wat_cost = 0
54
55
56     keep_looping = 1
57
58     while keep_looping == 1:
59         print ("Which pizza would you like to order today?")
60         print("1) Pepperoni Pizza      :Rp. 24000")
61         print("2) Cheese Pizza         :Rp. 23000")
62         print("3) Hawaiian Pizza      :Rp. 26000")
63         print("4) Meat Pizza           :Rp. 29000")
64         print("-) Next")
65         pizza_order=int(input("Order :"))
66         print("")
67
68         if 1 <= pizza_order <= 4 :
69             print("Any addition?")
70             print("1) Stuffed Crust      :+ Rp. 7000")
71             print("2) Extra Cheese       :+ Rp. 4000")
72             print("3) Extra Topping        :+ Rp. 5000")
73             print("4) No Addition         :+ Rp. 0")
74             print("-) Return")
75             pizza_topping = int(input("Order :"))
76             print("")
77
78             if pizza_order == 1 and pizza_topping == 1:
79                 print(f"Total Ordered = {pepper_stuffed_count} ")
80                 pepper_stuffed_count = int(input("How many? :"))
81                 print("")
82             elif pizza_order == 1 and pizza_topping == 2:
83                 print(f"Total Ordered = {pepper_cheese_count} ")
84                 pepper_cheese_count = int(input("How many? :"))
85                 print("")

```

```
86 elif pizza_order == 1 and pizza_topping == 3:
87     print(f"Total Ordered = {pepper_top_count} ")
88     pepper_top_count = int(input("How many? :"))
89     print("")
90 elif pizza_order == 1 and pizza_topping == 4:
91     print(f"Total Ordered = {pepper_count} ")
92     pepper_count = int(input("How many? :"))
93     print("")
94 elif pizza_order == 2 and pizza_topping == 1:
95     print(f"Total Ordered = {cheese_stuffed_count} ")
96     cheese_stuffed_count = int(input("How many? :"))
97     print("")
98 elif pizza_order == 2 and pizza_topping == 2:
99     print(f"Total Ordered = {cheese_cheese_count} ")
100     cheese_cheese_count = int(input("How many? :"))
101     print("")
102 elif pizza_order == 2 and pizza_topping == 3:
103     print(f"Total Ordered = {cheese_top_count} ")
104     cheese_top_count = int(input("How many? :"))
105     print("")
106 elif pizza_order == 2 and pizza_topping == 4:
107     print(f"Total Ordered = {cheese_count} ")
108     cheese_count = int(input("How many? :"))
109     print("")
110 elif pizza_order == 3 and pizza_topping == 1:
111     print(f"Total Ordered = {pine_stuffed_count} ")
112     pine_stuffed_count = int(input("How many? :"))
113     print("")
114 elif pizza_order == 3 and pizza_topping == 2:
115     print(f"Total Ordered = {pine_cheese_count} ")
116     pine_cheese_count = int(input("How many? :"))
117     print("")
118 elif pizza_order == 3 and pizza_topping == 3:
119     print(f"Total Ordered = {pine_top_count} ")
120     pine_top_count = int(input("How many? :"))
121     print("")
122 elif pizza_order == 3 and pizza_topping == 4:
123     print(f"Total Ordered = {pine_count} ")
124     pine_count = int(input("How many? :"))
125     print("")
126 elif pizza_order == 4 and pizza_topping == 1:
127     print(f"Total Ordered = {meat_stuffed_count} ")
```

```

128         meat_stuffed_count = int(input("How many? :"))
129         print("")
130     elif pizza_order == 4 and pizza_topping == 2:
131         print(f"Total Ordered = {meat_cheese_count} ")
132         meat_cheese_count = int(input("How many? :"))
133         print("")
134     elif pizza_order == 4 and pizza_topping == 3:
135         print(f"Total Ordered = {meat_top_count} ")
136         meat_top_count = int(input("How many? :"))
137         print("")
138     elif pizza_order == 4 and pizza_topping == 4:
139         print(f"Total Ordered = {meat_count} ")
140         meat_count = int(input("How many? :"))
141         print("")
142     else:
143         keep_looping = 1
144 else:
145     keep_looping = 2
146
147 keep_looping = 1
148
149 while keep_looping == 1:
150     print("Additional side dish?")
151     print("1) Bread stick          :Rp. 11000")
152     print("2) Soup                  :Rp. 6000")
153     print("3) French Fries            :Rp. 12000")
154     print("-) Next")
155     side_order=int(input("Order :"))
156     print("")
157
158     if side_order == 1:
159         print(f"Total Ordered = {bread_count} ")
160         bread_count = int(input("How many? :"))
161         print("")
162     elif side_order == 2:
163         print(f"Total Ordered = {soup_count} ")
164         soup_count = int(input("How many? :"))
165         print("")
166     elif side_order == 3:
167         print(f"Total Ordered = {french_count} ")
168         french_count = int(input("How many? :"))
169         print("")

```

```

170         else:
171             keep_looping = 2
172
173     keep_looping = 1
174
175     while keep_looping == 1:
176         print("Additional drinks?")
177         print("1) Soda                :(...)" )
178         print("2) Milkshake           :(...)" )
179         print("3) Water Bottle         :Rp. 5000")
180         print("-) Next")
181         drink_order=int(input("Order :"))
182         print("")
183
184         if drink_order == 1:
185             print("Which soda do you want?")
186             print("1) Coca-Cola         :Rp. 5000")
187             print("2) Teb                 :Rp. 6000")
188             print("3) Pepsi                 :Rp. 5500")
189             print("-) Return")
190             soda_order=int(input("Order :"))
191             print("")
192
193             if soda_order == 1:
194                 print(f"Total Ordered = {coca_count} ")
195                 coca_count = int(input("How many? :"))
196                 print("")
197             elif soda_order == 2:
198                 print(f"Total Ordered = {teb_count} ")
199                 teb_count = int(input("How many? :"))
200                 print("")
201             elif soda_order == 3:
202                 print(f"Total Ordered = {pop_count} ")
203                 pop_count = int(input("How many? :"))
204                 print("")
205             else:
206                 keep_looping = 1
207
208         elif drink_order == 2:
209             print("Which milkshake do you want?")
210             print("1) Chocolate Milkshake    :Rp. 16000")
211             print("2) Vanilla Milkshake        :Rp. 15000")

```

```

212     print("3) Strawberry Milkshake :Rp. 16000")
213     print("-) Return")
214     milkshake_order=int(input("Order :"))
215     print("")
216
217     if milkshake_order == 1:
218         print(f"Total Ordered = {choco_count} ")
219         choco_count = int(input("How many? :"))
220         print("")
221     elif milkshake_order == 2:
222         print(f"Total Ordered = {van_count} ")
223         van_count = int(input("How many? :"))
224         print("")
225     elif milkshake_order == 3:
226         print(f"Total Ordered = {str_count} ")
227         str_count = int(input("How many? :"))
228         print("")
229     else:
230         keep_looping = 1
231
232     elif drink_order == 3:
233         print(f"Total Ordered = {wat_count} ")
234         wat_count = int(input("How many? :"))
235         print("")
236
237     else:
238         keep_looping = 2
239
240     keep_looping = 1
241
242     while keep_looping == 1:
243         print("Here's your order :")
244         if pepper_count > 0:
245             pepper_cost = 24000 * pepper_count
246             print(f"Pepperoni Pizza ({pepper_count}) :Rp. {pepper_cost}")
247         if pepper_stuffed_count > 0:
248             pepper_stuffed_cost = (24000 + 7000) * pepper_stuffed_count
249             print(f"Pepperoni Pizza [Stuffed Crust] ({pepper_stuffed_count}) :Rp. {pepper_stuffed_cost}")
250         if pepper_cheese_count > 0:
251             pepper_cheese_cost = (24000 + 4000) * pepper_cheese_count
252             print(f"Pepperoni Pizza [Extra Cheese] ({pepper_cheese_count}) :Rp. {pepper_cheese_cost}")
253         if pepper_top_count > 0:

```

```

254     pepper_top_cost = (24000 + 4000) * pepper_top_count
255     print(f"Pepperoni Pizza [Extra Topping] ({pepper_top_count}) :Rp. {pepper_top_cost}")
256
257     if cheese_count > 0:
258         cheese_cost = 23000 * cheese_count
259         print(f"Cheese Pizza ({cheese_count}) :Rp. {cheese_cost}")
260     if cheese_stuffed_count > 0:
261         cheese_stuffed_cost = (23000 + 7000) * cheese_stuffed_count
262         print(f"Cheese Pizza [Stuffed Crust] ({cheese_stuffed_count}) :Rp. {cheese_stuffed_cost}")
263     if cheese_cheese_count > 0:
264         cheese_cheese_cost = (23000 + 4000) * cheese_cheese_count
265         print(f"Cheese Pizza ({cheese_cheese_count}) :Rp. {cheese_cheese_cost}")
266     if cheese_top_count > 0:
267         cheese_top_cost = (23000 + 5000) * cheese_top_count
268         print(f"Cheese Pizza [Extra Topping] ({cheese_top_count}) :Rp. {cheese_top_cost}")
269
270     if pine_count > 0:
271         pine_cost = 26000 * pine_count
272         print(f"Hawaiian Pizza ({pine_count}) :Rp. {pine_cost}")
273     if pine_stuffed_count > 0:
274         pine_stuffed_cost = (26000 + 7000) * pine_stuffed_count
275         print(f"Hawaiian Pizza [Stuffed Crust] ({pine_stuffed_count}) :Rp. {pine_stuffed_cost}")
276     if pine_cheese_count > 0:
277         pine_cheese_cost = (26000 + 4000) * pine_cheese_count
278         print(f"Hawaiian Pizza [Extra Cheese] ({pine_cheese_count}) :Rp. {pine_cheese_cost}")
279     if pine_top_count > 0:
280         pine_top_cost = (26000 + 5000) * pine_top_count
281         print(f"Hawaiian Pizza [Extra Topping] ({pine_top_count}) :Rp. {pine_top_cost}")
282
283     if meat_count > 0:
284         meat_cost = 24000 * meat_count
285         print(f"Meat Pizza ({meat_count}) :Rp. {meat_cost}")
286     if meat_stuffed_count > 0:
287         meat_stuffed_cost = (29000 + 7000) * meat_stuffed_count
288         print(f"Meat Pizza [Stuffed Crust] ({meat_stuffed_count}) :Rp. {meat_stuffed_cost}")
289     if meat_cheese_count > 0:
290         meat_cheese_cost = (29000 + 4000) * meat_cheese_count + 4000
291         print(f"Meat Pizza [Extra Cheese] ({meat_cheese_count}) :Rp. {meat_cheese_cost}")
292     if meat_top_count > 0:
293         meat_top_cost = (29000 + 5000) * meat_top_count
294         print(f"Meat Pizza [Extra Topping] ({meat_top_count}) :Rp. {meat_top_cost}")
295

```

```

296     if bread_count > 0:
297         bread_cost = 11000 * bread_count
298         print(f"Bread Stick ({bread_count}) :Rp. {bread_cost}")
299     if soup_count > 0:
300         soup_cost = 6000 * soup_count
301         print(f"Soup ({soup_count}) :Rp. {soup_cost}")
302     if french_count > 0:
303         french_cost = 12000 * french_count
304         print(f"French Fries ({french_count}) :Rp. {french_cost}")
305
306     if coca_count > 0:
307         coca_cost = 5000 * coca_count
308         print(f"Coca-Cola ({coca_count}) :Rp. {coca_cost}")
309     if teb_count > 0:
310         teb_cost = 6000 * teb_count
311         print(f"Teb ({teb_count}) :Rp. {teb_cost}")
312     if pop_count > 0:
313         pop_cost = 5500 * pop_count
314         print(f"Pepsi ({pop_count}) :Rp. {pop_cost}")
315
316     if choco_count > 0:
317         choco_cost = 16000 * choco_count
318         print(f"Chocolate Milkshake ({choco_count}) :Rp. {choco_cost}")
319     if van_count > 0:
320         van_cost = 15000 * van_count
321         print(f"Vanilla Milkshake ({van_count}) :Rp. {van_cost}")
322     if str_count > 0:
323         str_cost = 16000 * str_count
324         print(f"Strawberry Milkshake ({str_count}) :Rp. {str_cost}")
325
326     if wat_count > 0:
327         wat_cost = 5500 * wat_count
328         print(f"Water Bottle ({wat_count}) :Rp. {wat_cost}")
329
330     print("-----+")
331     total_cost = pepper_cost + pepper_stuffed_cost + pepper_cheese_cost + pepper_top_cost + cheese_cost + cheese_stu
332     print(f"Total :Rp. {total_cost}")
333     print("")
334     print("Would this be your order?")
335     print("1) Yes, that will be all.")
336     print("2) I want to change my order.")
337     finalize_order = int(input("Finalize :"))

```



```

338     print("")
339
340     if finalize_order == 1:
341         print(f"Would you like delivery?")
342         print("1) Delivery                :+ Rp. 5000")
343         print("2) Self Pick Up          :+ Rp. 0")
344         print("-) Return")
345         delivery_order = int(input("Order :"))
346         print("")
347
348         if delivery_order == 1:
349             print("With delivery your total will be")
350             total_cost = total_cost + 5000
351             print(f"Rp. {total_cost}")
352             print("Thank you for your purchase and have a great meal and a 'pon' day.")
353             exit()
354
355         elif delivery_order == 2:
356             print("With self pick up your total will be")
357             print(f"Rp. {total_cost}")
358             print("We'll wait at location, thank you, and have a 'pon' day.")
359             exit()
360
361     elif finalize_order == 2:
362         print("Alright please re-order from the beginning.")
363         print("")
364
365         pizza_ordering_system()
366
367
368     else:
369         keep_looping = 1
370
371
372
373
374     print("Welcome to Mama Pon Online Services, where happiness and fun transverse through cyber space.")
375
376     pizza_ordering_system()

```

4.1. The entire code

Welcome to Mama Pon Online Services, where happiness and fun transverse through cyber space.
Which pizza would you like to order today?

- 1) Pepperoni Pizza :Rp. 24000
- 2) Cheese Pizza :Rp. 23000
- 3) Hawaiian Pizza :Rp. 26000
- 4) Meat Pizza :Rp. 29000

-) Next

Order :1

Any addition?

- 1) Stuffed Crust :+ Rp. 7000
- 2) Extra Cheese :+ Rp. 4000
- 3) Extra Topping :+ Rp. 5000
- 4) No Addition :+ Rp. 0

-) Return

Order :1

Total Ordered = 0

How many? :1

Which pizza would you like to order today?

- 1) Pepperoni Pizza :Rp. 24000
- 2) Cheese Pizza :Rp. 23000
- 3) Hawaiian Pizza :Rp. 26000
- 4) Meat Pizza :Rp. 29000

-) Next

Order :0

Additional side dish?

- 1) Bread stick :Rp. 11000
- 2) Soup :Rp. 6000
- 3) French Fries :Rp. 12000

-) Next

Order :0

Additional drinks?

- 1) Soda :(...)
- 2) Milkshake :(...)
- 3) Water Bottle :Rp. 5000

-) Next

```

Order :0

Here's your order :
Pepperoni Pizza [Stuffed Crust] (1) :Rp. 31000
-----+
Total                               :Rp. 31000

Would this be your order?
1) Yes, that will be all.
2) I want to change my order.
Finalize :1

Would you like delivery?
1) Delivery                        :+ Rp. 5000
2) Self Pick Up                   :+ Rp. 0
-) Return
Order :1

With delivery your total will be
Rp. 36000
Thank you for your purchase and have a great meal and a 'pon' day.

Process finished with exit code 0

```

4.2. Examples of the program running.