ALGORITHM AND PROGRAMMING

PIZZA ORDERING SYSTEM

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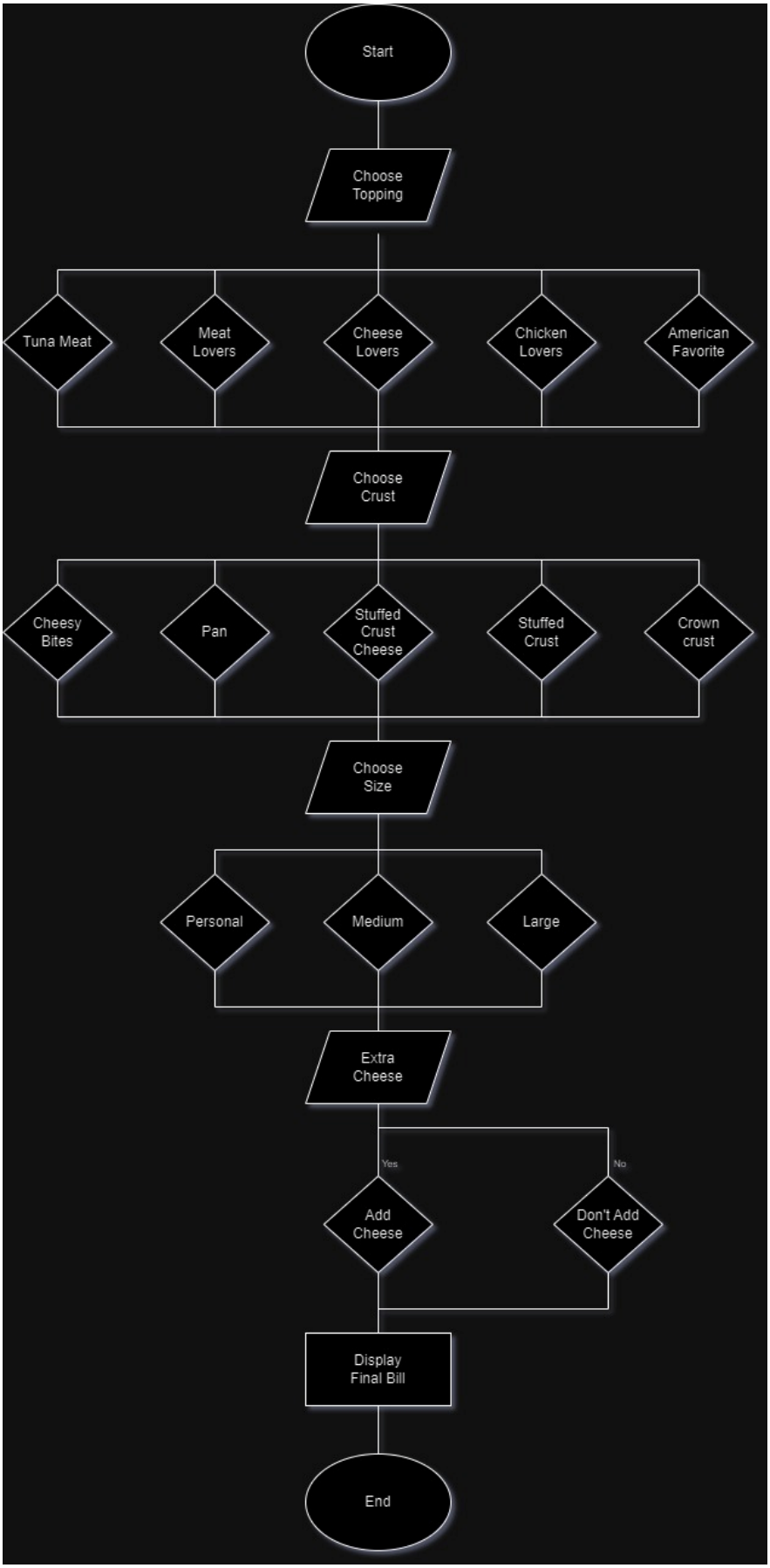
Flowchart:


Start
Choose Topping
Tuna Meat
Meat Lovers
Cheese Lovers
Chicken Lovers
American Favorite
Choose Crust
Cheesy Bites
Pan
Stuffed Crust Cheese
Stuffed Crust
Crown crust
Choose Size
Personal
Medium
Large
Extra Cheese
Yes
No
Add Cheese
Don't Add Cheese
Display Final Bill
End

Explanation:

1. Start: The process begins.

2. Choose Topping: The first decision is to select a pizza topping from one of the following options:

- Tuna Meat
- Meat Lovers
- Cheese Lovers
- Chicken Lovers
- American Favourite

3. Choose Crust: After selecting a topping, the next step is to choose the type of crust. The options are:

- Cheesy Bites
- Pan
- Stuffed Crust Cheese
- Stuffed Crust (normal)
- Crown Crust

4. Choose Size: Once the crust is selected, the customer can pick the size of the pizza:

- Personal
- Medium
- Large

5. Extra Cheese: The next step is to decide whether or not to add extra cheese.

- If yes, the customer adds cheese.
- If no, they skip adding cheese.

6. Display Final Bill: After all the selections are made, the final bill is displayed.

7. End: The process finish.

This flowchart represents a structured, step-by-step decision-making process for ordering a pizza. It starts with a simple choice (pizza topping) and moves through different customization options (crust, size, cheese) before finally concluding with the total price. This approach helps in understanding how systems or algorithms work by breaking down large problems into smaller, manageable decisions.

Source Code:

```
print("== Topping Pizza ==")
print("1. Tuna Meat")
print("2. Meat Lovers")
print("3. Cheese Lovers")
print("4. Chicken Lovers")
print("5. American Favorite")
totalPrice = 0

toppingPizza = input("Topping Pizza: ").lower()
if toppingPizza == "tuna meat":
    totalPrice += 35000
elif toppingPizza == "meat lovers":
    totalPrice += 40000
elif toppingPizza == "cheese lovers":
    totalPrice += 35000
elif toppingPizza == "chicken lovers":
    totalPrice += 40000
elif toppingPizza == "american favorite":
    totalPrice += 40000
else:
    print("Topping not found")
```

Explanation:

- Prints a list of available pizza toppings.

- The variable 'totalprice' will be used to store the total cost of the selected pizza.

- Takes user input for pizza toppings and converts it to lowercase.

- If the selected topping is "tuna meat", adds 35,000 to the totalPrice.

- If the selected topping is "meat lovers", adds 40,000 to the totalPrice.

- If the selected topping is "cheese lovers", adds 35,000 to the totalPrice.

- If the selected topping is "chicken lovers", adds 40,000 to the totalPrice.

- If the selected topping is "american favorite", adds 40,000 to the totalPrice.

- If the entered topping is not listed, prints the message "Topping not found".

```
print("== Crust Pizza ==")
print("1. CheesyBites")
print("2. Pan")
print("3. Stuffed Crust")
print("4. Crown Crust")
print("5. Stuffed Crust Cheese")

crustPizza = input("Crust Pizza: ").lower()
if crustPizza == "cheesyBites":
    totalPrice += 55000
elif crustPizza == "pan":
    totalPrice += 40000
elif crustPizza == "stuffed crust":
    totalPrice += 50000
elif crustPizza == "crown crust":
    totalPrice += 50000
elif crustPizza == "stuffed crust cheese":
    totalPrice += 50000
else:
    print("Crust not found")
```

Explanation:

- Prints a list of available pizza crust types.

- Takes user input for pizza crust types and converts it to lowercase.

- If the selected crust is "cheesy bites", adds 55,000 to the totalPrice.

- If the selected crust is "pan", adds 40,000 to the totalPrice.

- If the selected crust is "stuffed crust", adds 50,000 to the totalPrice.

- If the selected crust is "crown crust", adds 50,000 to the totalPrice.

- If the selected crust is "stuffed crust cheese", adds 50,000 to the totalPrice.

- If the type of crust entered is not listed, prints the message "Crust not found".

```
print("== Size Pizza ==")
print("1. Personal")
print("2. Medium")
print("3. Large")

size = input("Size Pizza: ").lower()
if size == "personal":
    totalPrice += 30000
elif size == "medium":
    totalPrice += 50000
elif size == "large":
    totalPrice += 70000
else:
    print("Size not found")

cheese = input("Do you want extra cheese (Yes/No)? ").lower()
if cheese == "yes":
    totalPrice += 13000

print(f"Thank you for choosing Pizza Hut Deliveries! Your final bill is: Rp. {totalPrice}")
```

Explanation:

- Prints a list of available pizza sizes.

- Takes user input for pizza size and converts it to lowercase.

- If the selected size is "personal", adds 30,000 to the totalPrice.

- If the selected size is "medium", adds 50,000 to the totalPrice.

- If the selected size is "large", adds 70,000 to the totalPrice.

- If the entered size is not listed, prints the message "Size not found".

- Takes input from the user on whether they want to add extra cheese and converts it to lowercase.

- If the user selects "yes" for extra cheese, adds 13,000 to the totalPrice.

- Prints a thank you message to the user and displays the final bill total with the totalPrice amount.

Output:

```
PS C:\Users\Acer\Documents\SEMESTER 1> & C:/Users/Acer/AppData/Local/Program
== Topping Pizza ==
1. Tuna Meat
2. Meat Lovers
3. Cheese Lovers
4. Chicken Lovers
5. American Favorite
Topping Pizza: Meat Lovers
== Crust Pizza ==
1. CheesyBites
2. Pan
3. Stuffed Crust
4. Crown Crust
5. Stuffed Crust Cheese
Crust Pizza: Pan
== Size Pizza ==
1. Personal
2. Medium
3. Large
Size Pizza: Medium
Do you want extra cheese (Yes/No)? No
Thank you for choosing Pizza Hut Deliveries! Your final bill is: Rp. 130000
PS C:\Users\Acer\Documents\SEMESTER 1>
```

Explanation:

- User selects topping meat lovers, adds 40,000 to the total price.

- User selects crust pan, adds 40,000 to the total price.

- User selects medium size, adds 50,000 to the total price.

- Total price: 130,000