INSTANT PIZZA VENDING MACHINE

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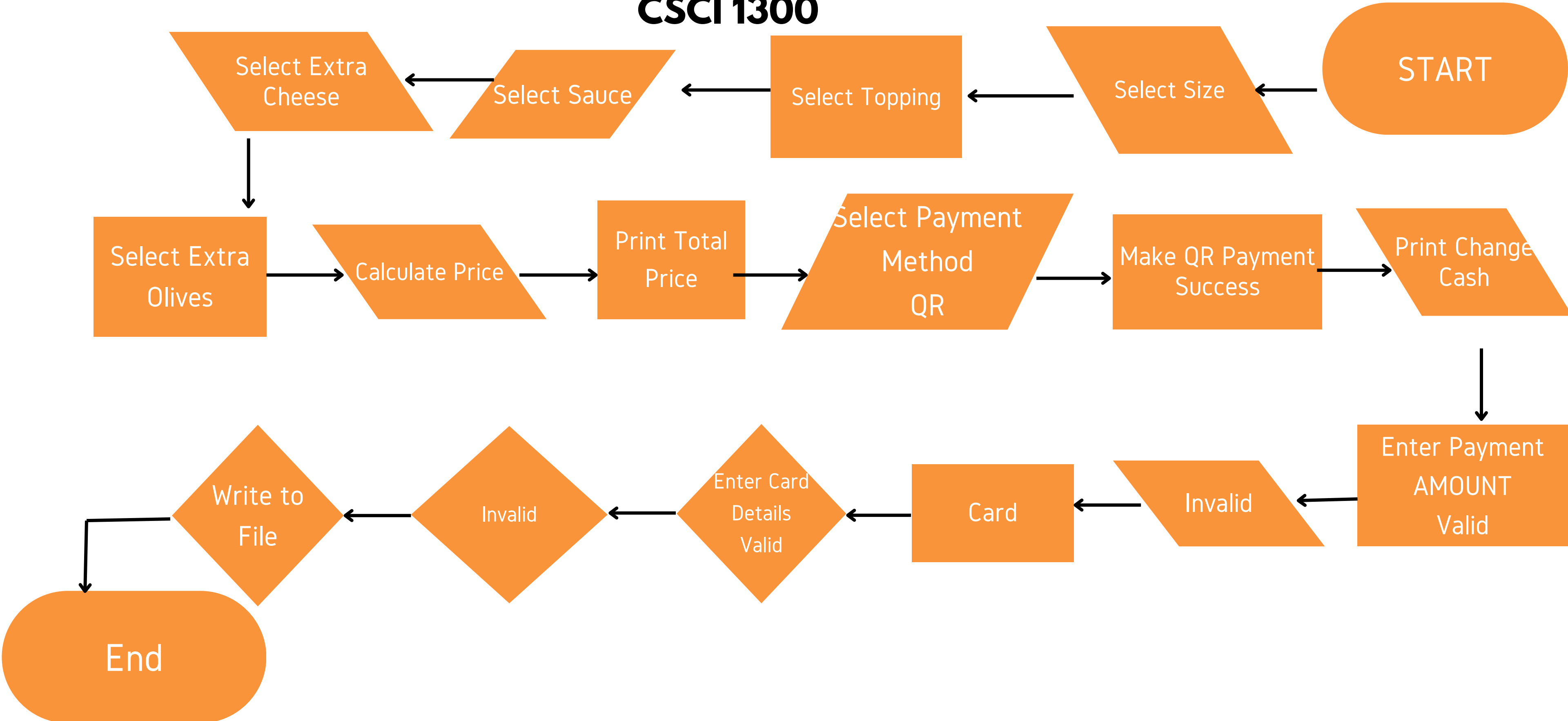
ABOUT THE PROGRAMMING

AN INSTANT PIZZA VENDING MACHINE IS A TECHNOLOGICALLY ADVANCED AND AUTOMATED SYSTEM DESIGNED TO PROVIDE FRESHLY PREPARED PIZZAS TO CUSTOMERS IN A MATTER OF MINUTES. THE MACHINE COMBINES ELEMENTS OF TRADITIONAL PIZZA PREPARATION WITH CUTTING-EDGE TECHNOLOGY, MAKING IT POSSIBLE TO ENJOY A HOT AND DELICIOUS PIZZA WITHOUT THE NEED FOR HUMAN INTERVENTION. QUICK-PREPARED PIZZA IS SOLD BY THE MACHINE IN A VARIETY OF SIZES AND PRICING. A CUSTOMER HAS THE OPTION TO SELECT HIS PREFERRED PIZZA KIND, ADD EXTRA SAUCE, AND ASK FOR EXTRA CHEESE IF DESIRED. THE MACHINE ALERTS THE USER IF AN ITEM IS NOT AVAILABLE. YOU CAN PAY WITH CASH OR A QR CODE.
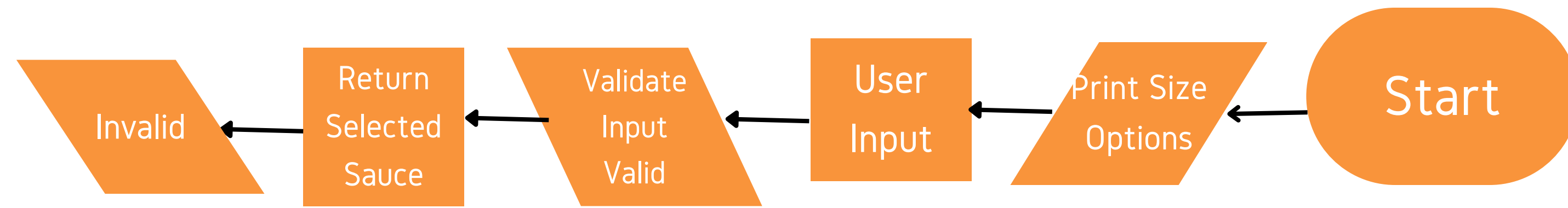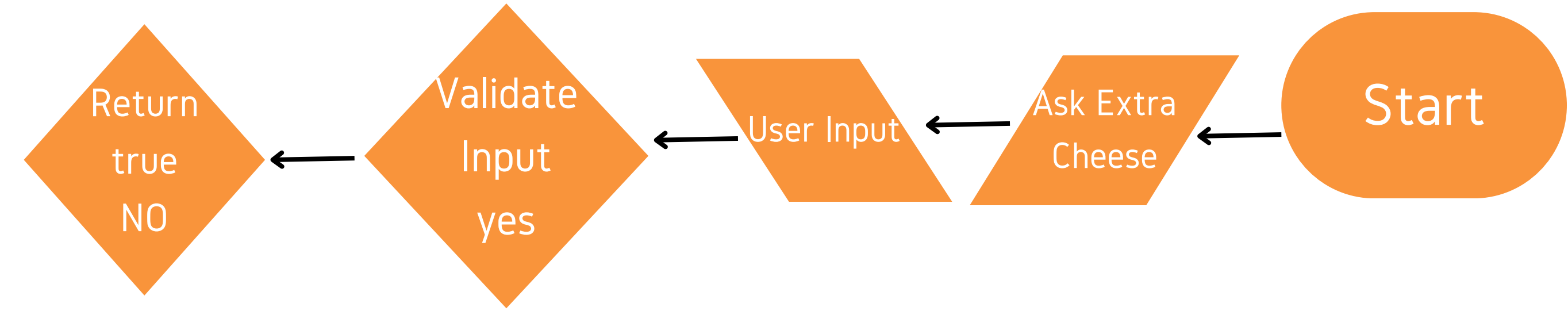
FLOW CHARTS

CSCI 1300

START → Select Size → Select Topping → Select Sauce → Select Extra Cheese

Select Extra Cheese → Select Extra Olives → Calculate Price → Print Total Price → Select Payment Method QR → Make QR Payment Success → Print Change Cash

Print Change Cash → Enter Payment AMOUNT Valid → Invalid → Card → Enter Card Details Valid → Invalid → Write to File → End

select sauce flow chart

Start → Print Size Options → User Input → Validate Input Valid → Return Selected Sauce → Invalid

select extra cheese flow chart

Start → Ask Extra Cheese → User Input → Validate Input yes → Return true NO

select extra olive flow chart

Start → Ask Extra Olives → User Input → Validate Input Yes → Return true NO

Start → Calculate Base Price → Calculate Topping Price → Calculate Sauce Price → Calculate Extra Cheese Price → Calculate Extra Olives Price → Return Total Price

Start → Print Payment Options → User Input → Validate Input QR → Make QR Payment Success → Print Change Cash
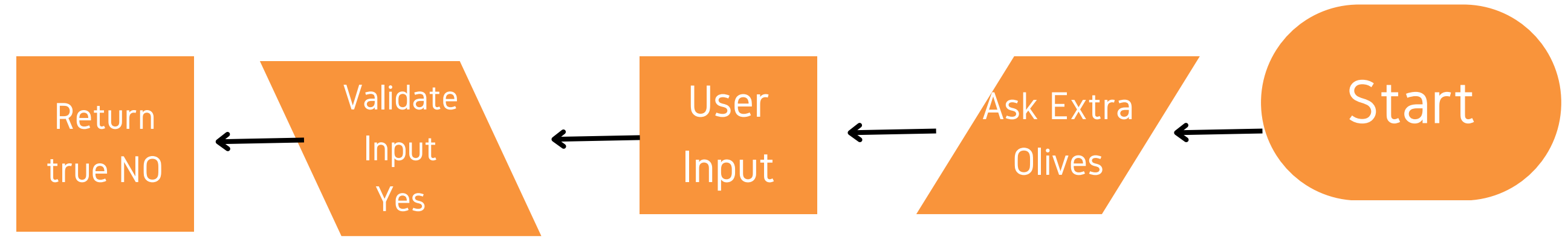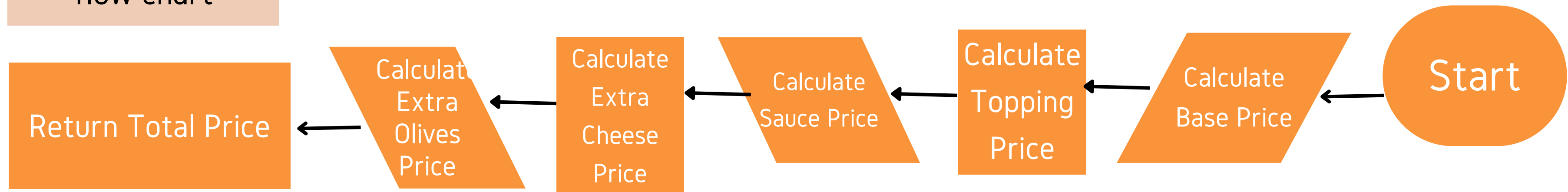
Print Change Cash → Enter Payment Amount Valid Card → Enter Card Details Valid Invalid → Retry Payment
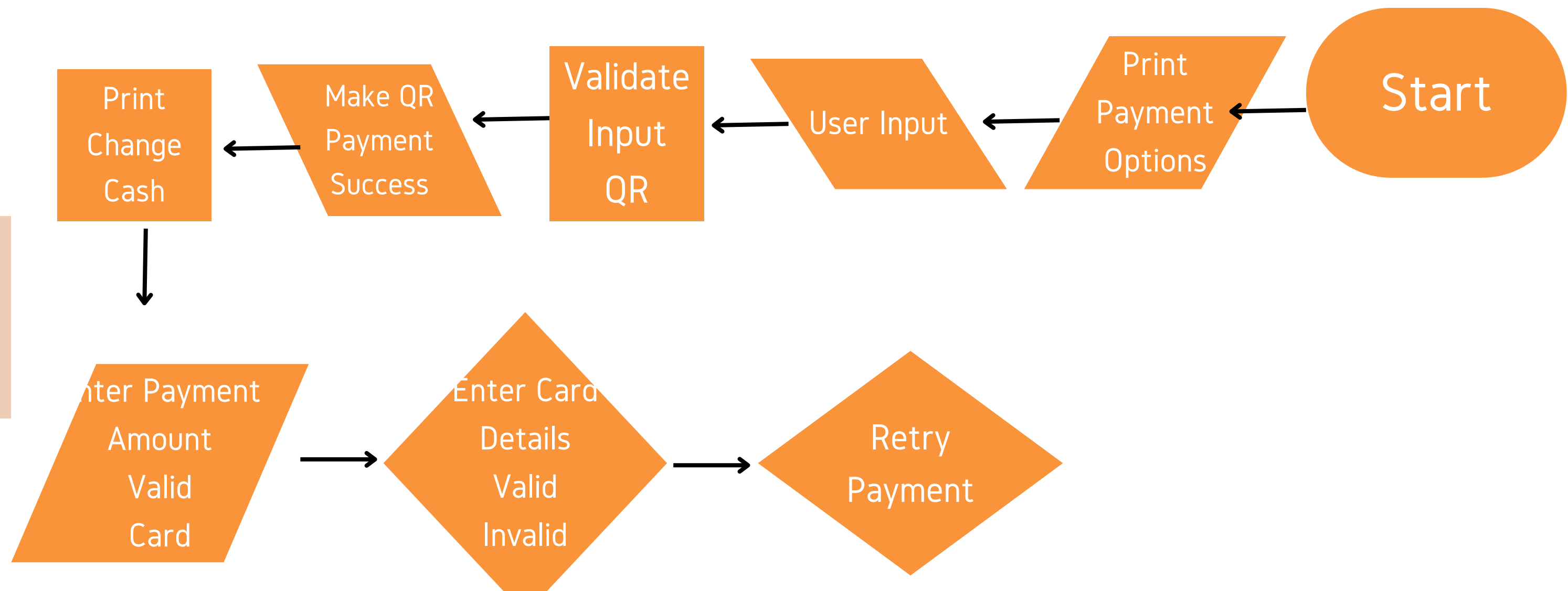
METHODS

MAIN METHOD

This is the main method where the execution of the program starts. It includes the logic for selecting pizza size, toppings, sauce, handling payment, calculating the total price, and writing a receipt to a file.

SELECTSIZE METHOD

This method prompts the user to select a pizza size (Personal, Regular, or Large) and returns the user's choice.

SELECTTOPPING METHOD

This method prompts the user to select a pizza topping (Chicken Pepperoni, Beef Pepperoni, Hawaiian, Seafood, or Cheese) and returns the user's choice.

SELECTSAUCE METHOD

This method prompts the user to select a pizza sauce (Tomato, Barbecue, or Garlic) and returns the user's choice.

METHODS

SELECTEXTRACHEESE METHOD

This method asks the user if they want extra cheese and returns a boolean value based on their choice.

SELECTEXTRAOLIVES METHOD

This method asks the user if they want extra olives and returns a boolean value based on their choice.

CALCULATEPRICE METHOD

This method calculates the total price of the pizza based on the selected size, topping, sauce, and additional options (extra cheese, extra olives).

MAKEPAYMENT METHOD

This method handles the payment process, including selecting a payment method (QR, Cash, or Card), entering the payment amount, and handling invalid payment amounts.
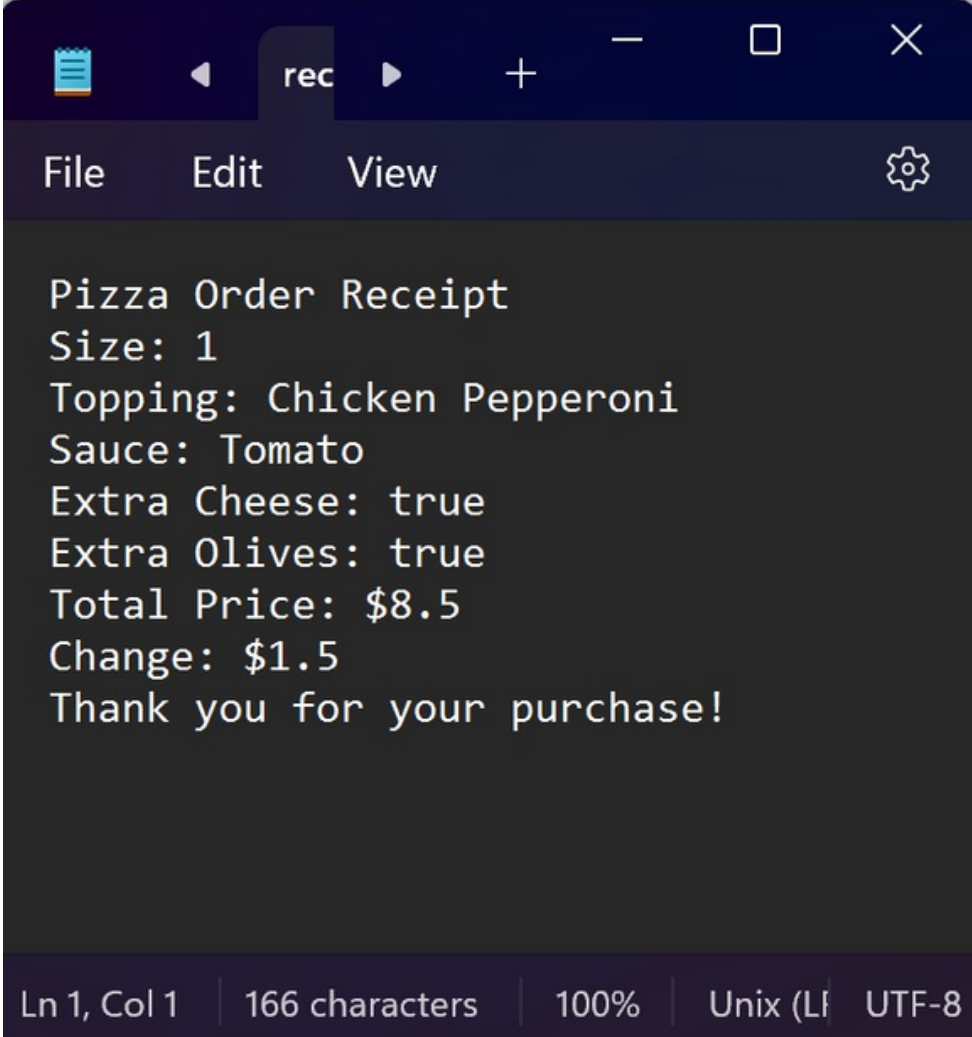
OUTPUT & TXT FILE

Output - EOPPizzaVendingMachine (run)

```
run:
Select a size:
1. Personal - $5.00
2. Regular - $8.00
3. Large - $10.00
Enter your choice: 1
Select a topping:
1. Chicken Pepperoni - $1.50
2. Beef Pepperoni - $1.50
3. Hawaiian - $2.00
4. Seafood - $2.50
5. Cheese - $1.00
Enter your choice: 1
Select a sauce:
1. Tomato - $0.50
2. Barbecue - $0.70
3. Garlic - $0.60
Enter your choice: 1
```

```
Extra Cheese (+$1.00)? (y/n): y
Extra Olives (+$0.50)? (y/n): y
Total Price: $8.50

Select a payment method:
1. QR
2. Cash
3. Card
Enter your choice: 1
You have chosen payment method 1.
Enter payment amount: 10
Change: $1.50
BUILD SUCCESSFUL (total time: 33 seconds)
```

rec — File Edit View

```
Pizza Order Receipt
Size: 1
Topping: Chicken Pepperoni
Sauce: Tomato
Extra Cheese: true
Extra Olives: true
Total Price: $8.5
Change: $1.5
Thank you for your purchase!
```

Ln 1, Col 1   166 characters   100%   Unix (LF)   UTF-8

THANK YOU

PRESENTERS, STUDENTS MARWA AND SUNDUS

LECTURER PROFESSOR SURIANI BT. SULAIMAN