Expectation:

- Design the problem with Object Oriented Design concepts with proper classes for business logic, data and view.
- Set up a proper project structure
- Clean production like code with
- Solve the problem for different scenarios(eg., invalid cases) of the expected functionality

Subway Problem Statement:

Subway offers different type sandwiches which allows customers to pick different ingredients to create sandwidth to the customer's taste.

Ingredients with its price (in rupees):

    i) Crust

        Hard - 10 ₹

        Thin - 10 ₹

        Soft - 12 ₹

    ii) Filling

        Chicken Tikka - 120 ₹

        Paneer Tikka   - 100 ₹

        Turkey Meat   - 130 ₹

    iii) Toppings

        Cucumber   - 25 ₹

        Tomato   - 20 ₹

        Meat strip   - 45 ₹

        Cabbage   - 20 ₹

Business Rules:

1) Veg(non-meat) Sandwitches cannot be combined with 'Meat strip' topping.

2) Crust and Filling can be only one choice for a Sandwich. Multiple Toppings (max of 3) can be added to a Sandwich.

3) If the user selects more than 2 toppings, one of the toppings is free of charge (the toppings with the lowest cost is free of charge) e.g., user selects Cucumber, Tomato, Cabbage (Cabbage or Tomato can be free - both are the lowest price).

Program to generate the invoice:

1) **Generate the Invoice** for the selected Sub.

- Users are provided a choice to choose the 1) Order 'Sub' off the day or 2) Order your own 'Sub'
- For option 1) "Order 'Sub' off the day" using random logic to generate the sandwich combination. e.g., Chicken Tikka Hard Crust Sandwich with Cucumber, Meat strip toppings
- For option 2) "Order your own 'Sub'". Users will select "Crust" (max - 1), "Filling" (max - 1), "Toppings" (max - 3).

- Finally "Generate" the Invoice based on Option 1) or Option 2) sub and print order confirmation.

Example Output: (**'>>'** represents user input prompt, **'blue' color** represents console print output)

Welcome to Subway:
1) Order 'Sub' off the day
2) Order your own 'Sub'
3) Exit

Step 1) User Select Option 1 from above menu
>> 1
'Continue to Step 3) to show the Invoice.

Step 2) User Select Option 2 from above menu which prints further options.
>> 2
- Select "Crust" (max of 1)
  1) Hard - 10 ₹
  2) Thin - 10 ₹
  3) Soft - 12 ₹
User selects 1) Hard
>> 1

- Select "Filling" (max of 1)
  1) Chicken Tikka - 120 ₹
  2) Paneer Tikka - 100 ₹
  3) Turkey Meat - 130 ₹
User selects 1) Chicken Tikka
>> 1

- Select "Toppings" (max of 3)
  1) Cucumber - 25 ₹
  2) Tomato - 20 ₹
  3) Meat strip - 45 ₹
  4) Cabbage - 20 ₹
User selects 1) Cucumber 2) Meat Strip 3) Cabbage
>> 1,2,3

Step 3) Once the Option 1) or 2) flow is completed. Show the Invoice.
- Invoice for Sub

Crust - Hard	- 10 ₹	
Filling - Chicken Tikka	- 120 ₹	
Topping - Cucumber	- 25 ₹	
Topping - Meat Strip	- 45 ₹	
Topping - Cabbage	- 0 ₹	(Note: this is 0 since more than 2 topping)
Total	- 200 ₹	

>> (enter to confirm) and shows output "Your subway order is placed for 200 ₹".