

Restaurant Hours

1. Use a string array of 10 elements
2. Output: "The Authentic Burger and Bakery Restaurant"
"Opened Hours"
"Monday: 6:00P.M.-11:30P.M.\n\n",
"Tuesday: 6:00P.M.-11:30P.M.\n\n",
"Wednesday: 6:00P.M.-11:30P.M.\n\n",
"Thursday: 6:00P.M.-11:30P.M.\n\n",
"Friday: 6:00P.M.-1:30A.M.\n\n",
"Saturday: 6:00P.M.-3:00A.M.\n\n",
"Sunday: 6:00P.M.-1:30A.M.\n\n",
3. Vector with string array and arr + to continue output
4. Incorporate vector is string, size of array / size of string
5. using a for loop: create (string of days: vector of string)
6. Output the open hours of the restaurant;

Restaurant Intro and Seating Choices

1. Write a comment: `//cout` the statements to greet user and input choices for them to sit
2. Begin with the waiter speaking to the customers
3. We will execute with an output of "Hello! Welcome to the Authentic Burger and Bakery Restaurant!"
4. Display a seating Menu for them to choose from
5. Output:

```
"Seating Area Choices"
"1. Scenic Indoor View(Max:4 people) "
"2. Elegant Dining Table(No Limit) "
"3. Scenic Outdoor View(Max:5 people)"
"4. Comfy Couches(Max:4 or 8 people)"
"5. Corner High Chair Table(Max:6 people)"
"6. Anywhere(No Limit)"
```
6. Using `int` create the name total
7. Add a comment: the user will enter the amount dining today
8. Execute the output: "How many of you will be dining today? "
9. The user will input total then use `int` to add name as a variable
10. Add the comment: `//user` enters the name of the party
11. Execute the output: "Please enter your name followed by your top three seating choices, each followed by a comma\n(Ex:Liz, 3, 5, 6)\n?"
12. Allow the user to input name
13. Add a comment: `//use if` statements to provide a timing for the wait
14. Using the `if` statement, write if the total is greater than 4 people
15. The output will be: "Great! Your wait time will be 20 minutes"
16. Write the comment: `//use if` statement for greater than or less than
17. Add another `if` statement: if total is less than 4 people
18. Then Output "Great! Your wait time will be 10 minutes"
19. if the `if` statement equals total
20. And if the total is equal to four
21. The Output will be "Great! Your wait time will be about 8 minutes"
22. Default output will be "Please take a seat in our waiting area and we will call you when we are ready"

Dan Taking Main Menu Order

Prompt "Hello, My name is Dan and I will be taking your order.To start off, please enter the amount of options you will be ordering."

User inputs amount of options ordered.

1. If the amount of options ordered is one, cout the statement, "To confirm, you are ordering one option from the menu" in order to reassure the waiter of the amount of menu options ordered.

Also cout the statement, "Please enter the foods you will be ordering followed by a comma" in order for me to know what foods the customer would like.

Default statement: "Thanks for ordering! Your food will be ready in approximately 20-25 minutes!" This statement gives the user a wait time

- 2.If the amount of options ordered is two, cout the statement,"To confirm, you are ordering two options from the menu "in order to reassure the waiter of the amount of menu options ordered.

Also cout the statement,"Please enter the foods you will be ordering followed by a comma" in order for us to know what foods the customer would like.

DEfault statement: "Thanks for ordering!\nYour food will be ready in approximately 30-35 minutes!" This statement gives the user a wait time

3. If the amount of options ordered is three, cout the statement, "To confirm, you are ordering three options from the menu "in order to reassure the waiter of the amount of menu options ordered.

Also cout the statement,"Please enter the foods you will be ordering followed by a comma" in order for us to know what foods the customer would like.

Default statement: "Thanks for ordering!\nYour food will be ready in approximately 35-40 minutes!" This statement gives the user a wait time

4. If the amount of options ordered is four, cout the statement, "To confirm, you are ordering four options from the menu "in order to reassure the waiter of the amount of menu options ordered."

Also cout the statement,"Please enter the foods you will be ordering followed by a comma" in order for us to know what foods the customer would like.

Default Statement: "Thanks for ordering!\nYour food will be ready in approximately 45-50 minutes!" This statement gives the user a wait time

5. If the amount of options ordered is greater than 5, the default message is shown: "Please enter the foods you will be ordering followed by a comma", in order for the waiter to receive the order. Then the default message is shown, "Thanks for ordering!\nYour food will be ready soon!."

Combined Menu Display

1. Using an array we will display a menu for the food options of the entire restaurant
2. Create a string Array of 20 units due to the creation of at most 20 lines
3. Output: The Authentic Burger and Bakery Restaurant Menu"
4. Output Slogan: Forget the Diet, Have a Burger & Dessert Tonight!
5. Output Dinner Options: Price:

"Build-Your-Own-Burger(Create through our link!)	\$8.99
"Old-Fashioned Beef Burger	\$7.99
Double Patty Beef Burger	\$8.99
The Original Chicken Burger	\$6.99
Cheesy Overload Chicken Burger	\$7.50
Cheesy Overload Beef Burger	\$7.50
All-Time Favorite Vegan Burger	\$6.99"

Output Combo Options:	Price:
Two Burgers + One Small Drink + Side	\$12.99
One Burger + Side	\$8.99
Burger + Two Sides	\$10.99

Sides (Choose One per Combo or \$3.99 Individually):

Curly Fries
Sweet Potato Fries
Nachos with Cheese
Onion Rings
Coleslaw
Mashed Potatoes

Output Beverages:	Price:
Pepsi	\$1.99
Fanta	\$1.99
Coca-Cola	\$1.99
Root-Beer	\$1.99
7 Up	\$1.99
Chocolate Milkshake(Medium)	\$2.50
Vanilla Milkshake(Medium)	\$2.50
Strawberry Milkshake(Medium)	\$2.50
Cup of Black Coffee	\$1.00

Iced Frappuccino(Medium)	\$3.00
Green Tea	\$1.50
Black Tea	\$1.50

Output Desserts:	Price:
Brownies(5)	\$4.00
Ice-Cream(Flavors: Vanilla/Chocolate/Strawberry/Mint/Oreo)	\$3.99
Cheesecake(Vanilla, Oreo Cream, Salted Caramel,\nWhite Chocolate, Raspberry, Tiramisu)	\$5.99
Creme Brulee	\$3.99
Red-Velvet Cake	\$3.99
Chocolate Chip Cookie Pie	\$5.99
Chocolate Mousse(Medium)	\$2.99
Macaroons(3)	\$4.50
Ice-Cream Sundae(Limit: 3 Flavors)	\$6.99
Tapioca Pudding	\$3.00
Strawberry-Filled Crepes(3)	\$5.50
Fruit Platter(Medium)	\$5.50

" The Authentic Burger and Bakery

Restaurant\n-----\n"

" Build-Your-Own-Burger Menu(Fixed Price: \$8.99)",

"\nMeat: Fish Beef Chicken Vegan\n\n",

"Dressings(Choose 3 Max): Ranch Ketchup Hot Sauce Garlic Sauce Mayonnaise\n\n",

"Toppings(Choose 5 Max): Lettuce Tomato Cheese Avocado Cucumber\n\n" };

6. Use the for loop in order to output the entire array

7. Add comment: //because we are using an array we are required to add a for loop and cout the array

8. Array statement would be: for (int i = 0; i < 20; i++)

cout << Array[i] << endl;

Dan Taking Build-your-Own-Burger Order

1. "Greetings, my name is Dan\n How many burgers will you\n be ordering today? "
2. User will input quantity with cin statement
3. Use type int for variable name type
4. Output the Prompt:"Great! And what type of burger(s), topping(s), and dressing(s)\n would you like?(please enter each followed by a comma "
5. Provide example in output to help customer understand how to input order
6. Comment: "Ex: Vegan, Lettuce, tomato, Hot Sauce, Ketchup"
7. User will input type, toppings, and dressings of their choice through cins statement
8. Set precision to 4 so decimals are only in US Cash Form (ex \$1.99)
9. Use float type for the variable name "price"
10. With math, do $\text{price} = \text{quantity} * 8.99$, making 8.99 the price of each burger no matter the toppings/dressings/meat chosen
11. Output: "Alright, so your total will be \$" with output of price due to calculations made above
12. Use int type for the variable name "time"
13. Let $\text{time} = 6 * \text{quantity}$ so that each burger takes about 6 minutes to make
14. "Your order should be ready in --- minutes!"

Burger Shop Receipt

1. This is a receipt for the customer
2. Use int type for variable name count which equals 1
3. Use int type for variable name yes
4. Use double type for variable name tip so program will execute 4 digits for total
5. Use int type for variable name dollars, tax and total
6. Use do while loop to output: Enter your total
7. Have user enter total
8. Use while loop if the count is less than one
9. Since tax in the US is approx 7.25% of your total, Use the formula
10. $\text{tax} = (0.072 * \text{total}) + \text{total}$
11. Output the statement, "With tax, your total is \$"
12. Set precision to 4 so that the numbers are understandable for user
13. Output the question "Would you like to give a tip?(Enter 1 for yes and 2 for no)
14. The user will put whether or not they would like to give a tip
15. If a user enters 1 the output will be : "How many dollars would you like to tip?"
16. The user will input the amount they would like to tip
17. Then to calculate total, use $\text{total} = \text{dollars} + \text{tax}$;
18. Output the statement "Your official total will be"
19. Use the else statement, if the user enters 2.
20. Then output statement : "Alright, your official total will be"

Restaurant Customer Review

1. We will use passing parameters for this program
2. Start off with void for getName int and asterisk
3. Next add void for stringReview int and asterisk
4. Use int to call variable name
5. Call getName and pass the address of number using & symbol
6. Call StringReview and pass the address os name using & symbol
7. Return
8. Use void then input getName with input and * before the word "input"
9. Output: reviews that are verified
"Very great food! And the service is very fast!"
"The food is fresh and hot! The wait time is given and its very accurate"
"Really packed restaurants so try to get there on time to avoid waiting!"
"The scenic view outside is very beautiful and calming"
"The burgers are the best! Never had such a simple yet satisfying burger!"
"Order the strawberry cheesecake for dessert! It's THE BEST!"
"Now it's time for us to hear what you have to say!"
10. Now for customer to write review ask them to enter name
11. Cin for user to input review
12. Use if else statement for program to output a thank you statement or ask them to write a review and then press enter
13. Output if a user enters a review: "Thank you so much for your review! We are always looking for ways to improve and better the service for our customers!"
14. Output if user does not enter anything: "Please write a review before pressing enter"

Employees' GrossPay Check Using Parallel Array

```
#include <iostream>
```

```
#include<cmath>
```

```
#include<iomanip>
```

1. To begin we will write three include statements, including `iostream`, `cmath`, and `iomanip`
2. Write the comment: `//This program allows employees to input pay and tips to keep track for weekly checks and use cmath to calculate the total amount of check`
3. Write the comment:`//use iomanip for setprecision and having an appropriate gross pay that is exact`
4. Input `"using namespace std;"` and `"int main() { "`
5. Because we are only allowing 3 employees at a time in the array we would write: `"const int EMPLOYEES_PAY = 3;"`
6. Then, to have Employees enter the hours worked this week, we will write: `"int hours[EMPLOYEES_PAY]"` followed by a semi colon
7. Write the comment: `//we use double for tips because employees will need to use Us Dollar form which may include cents in the tips`
8. Write: `double tips[EMPLOYEES_PAY]` followed by a semi-colon
9. We will cout the beginning statement and inform customers this is not a program for them to use
10. Next we will ask the employees: "Enter the number of hours employees worked this week, to determine pay rate." by outputting statement with `cout`
11. Input the for loop due to the use of an array, which would be `for(int index = 0; index < EMPLOYEES_PAY; index++)` followed by an opening bracket
12. Ask the user to input the number of hours employee worked through the `cout` statement
13. Have the user input number of hours with `cin` statement such as `cin>>hours[index]` followed by a semi colon
14. Cout the statement: "Enter the dollar amount that employee # "<(index+1)<" has received in tips\n(Enter 0 if none): \$ ";
15. Have the user input tips amount with `cin` statement ending with closing bracket
16. Input the comment with `//`: we will setting precision to 2 to make sure that the numbers after the decimal is accurate in US dollar form

17. Output the statement: "Below is the total pay each employee will receive by the end of the week:"
18. The line above will allow employees to know that the calculations are being generated at the moment
19. After the output we will write a "fixed<<showpoint<<setprecision(2)" to make sure that the numbers outputted are in US Dollar Form
20. We are using the for loop again to include the pay for each employee
21. For loop would be: for(int index = 0; index < EMPLOYEES_PAY; index++) {
22. Write the comment: //the wage paid to each employee is \$14.75 per hour
23. Using "double weeklyPay = (hours[index]*14)+tips[index];" to calculate the weekly pay of the employee including tips
24. We will output: cout<<"Employee #"<<(index +1) to make sure that the correct weekly pay is displayed next to the correct employee name
25. Comment: //we use fixed showpoint to make sure the weeklyPay that is outputted for the user is accurate in US Dollar form
26. Next we will cout weekly pay with:
fixed<<showpoint<<setprecision(2)<<"\n"<<endl; and closing bracket
27. We are outputting fixed, showpoint and setprecision to ensure that the output is in US Dollar Form
28. Output, "\nMake sure that the grossPay matches the check you are receiving this week!" and semicolon
29. With this output employees know that the purpose of the program is to inform themselves of whether the amount received on their checks is correct.
30. End with the return statement