Q1. Warm Up!

1. Sarah's Flowchart:

```
                    Sarah Wears What?
                    /              \
                   v                \
               Is it Raining?        \
               /          \           \
            Yes            No           \
             |              |            |
             v              v            |
        Wear Socks      Is it Cloudy?    |
        Wear Boots       /       \       |
                       Yes        No     |
                        |          |     |
                        v          v     v
                  Wear Socks      Wear Sandals
                  Wear Sandals
```

2. How Do I Eat?

```
                    What Would I Eat For Lunch?

        No              less than 2           No

   Are there leftovers?    Slice of Bread?    Fruit

      2 or more   No                              24/7

      Sunflower Butter?    No      2 or more

   Yes       Yes                 Yes

                    Jelly?   Lunch Meat?

        Yes   Mayonnaise  Ketchup

   Eat leftovers     Make a Sandwich    Fruit Bowl Snack   Cookies
                                                           (Main or Side)
```
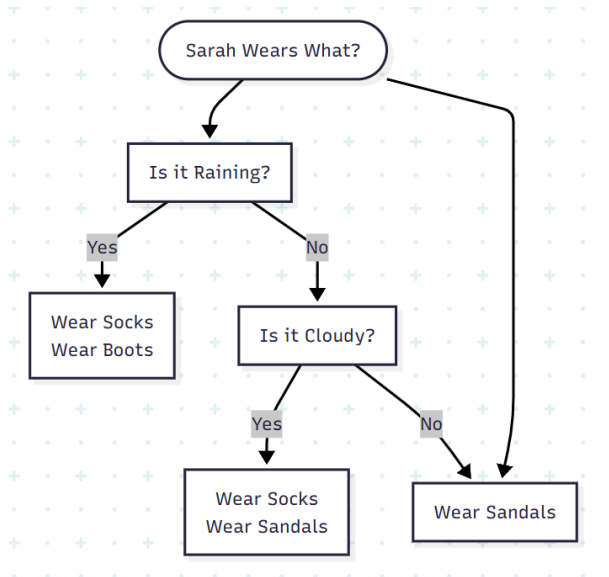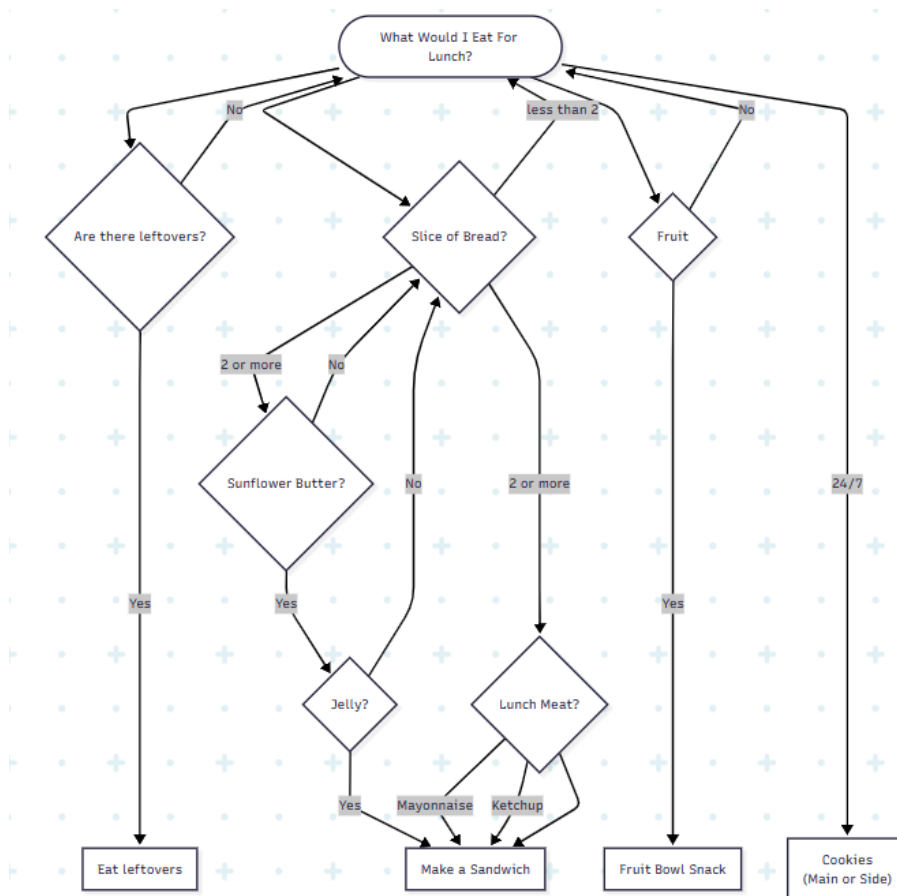
Q2. Would You Like Fries With That

```
package hw_04_code;

import java.util.Scanner;
```

```java
public class QuickBurgerMenu {
    public static void main(String[] args){
        final double TAX = 0.095;
        final String menu1 = "Quick Burger";
        final double price1 = 5.00;
        final String menu2 = "Quick Fries";
        final double price2 = 2.00;
        final String menu3 = "Quick Shake";
        final double price3 = 3.00;
        double total=0.00, subtotal=0.00, taxToPlus=0.00;

        Scanner input = new Scanner(System.in);
        System.out.println("Welcometoquickburger! Hurryup-Hurryup!");
        System.out.printf("Let's get you started!\n"+
        "We have our classic menu to choose from!\n"+
        "%-15s %8.2f\n"+
        "%-15s %8.2f\n"+
        "%-15s %8.2f\n"+
        "So, would you like the Quick Burger? ",
        menu1,price1,
        menu2,price2,
        menu3,price3
        );
        String choice1 = input.nextLine();
        System.out.print("Would you like Quick Fries? ");
        String choice2 = input.nextLine();
        System.out.print("Will you finish this order with a Quick Shake? ");
        String choice3 = input.nextLine();
        input.close();

        System.out.println("FINAL");
        System.out.println("=======================");

        if(choice1.compareToIgnoreCase("y")>=0){
        subtotal+=price1;
        System.out.printf("%-15s%8.2f%n",menu1,price1);
        //System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice1, subtotal);
        }

        if(choice2.compareToIgnoreCase("y")>=0){
        subtotal+=price2;
        System.out.printf("%-15s%8.2f%n",menu2,price2);
        //System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice2, subtotal);
        }

        if(choice3.compareToIgnoreCase("y")>=0){
        subtotal+=price3;
        System.out.printf("%-15s%8.2f%n",menu3,price3);
        //System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice3, subtotal);
        }

        taxToPlus = subtotal * TAX;
        total = subtotal + taxToPlus;
        System.out.printf("_____%n"+
        "%-15s%8.2f%n"+
        "%-15s%8.2f%n"+
        "%-15s%8.2f%n"+
        "ThanksforchoosingQuickBurger! Hurryup-Hurryup!",
        "Subtotal:", subtotal, "Tax:", taxToPlus, "Total:", total);




        //System.out.println(choice1.compareToIgnoreCase("y"));
    }
}
```

Q3. Would You Like Caviar With That?

```java
package hw_04_code;

import java.util.Scanner;

public class ButlerBurgerMenu {

    public static void main (String[] args) {

        final double TAX = 0.095;
        final String menu1 = "Baron's Burger";
        final double price1 = 15.00;
        final String addon11 = "Worcestershire Sauce";
        final double addonPrice11 = 5.00;
        final String addon12 = "Pork Belly Bacon";
        final double addonPrice12 = 10.00;
        final String addon13 = "Caviar";
        final double addonPrice13 = 50.00;
        String choice1, choice11, choice12, choice13;

        final String menu2 = "Dutchess's Fries";
        final double price2 = 8.00;
        final String addon21 = "Capers";
        final double addonPrice21 = 5.00;
        final String addon22 = "Caviar";
        final double addonPrice22 = 30.00;
        String choice2, choice21, choice22;

        final String menu3 = "Marie Antoinette's Cake Shake";
        final double price3 = 12.00;
        final String addon31 = "Champagne Sprinkles";
        final double addonPrice31 = 10.00;
        String choice3, choice31;

        double total=0.00, subtotal=0.00, taxToPlus=0.00;


        Scanner input = new Scanner(System.in);
        System.out.println("Welcometoquickburger! Hurryup-Hurryup!");
        System.out.printf("Let's get you started!\n"+
        "We have our classic menu to choose from!\n"+
        "%-15s $%8.2f\n"+
        "%-15s $%8.2f\n"+
        "%-15s $%8.2f\n"+
        "So, would you like the Baron's Burger? ",
        menu1,price1,
        menu2,price2,
        menu3,price3
        );
        choice1 = input.nextLine();
        if(choice1.compareToIgnoreCase("y")>=0){
            System.out.printf("Would you like to add %s? ", addon11);
            choice11 = input.nextLine();
            System.out.printf("Would you like to add %s? ", addon12);
            choice12 = input.nextLine();
            System.out.printf("Would you like to add %s? ", addon13);
            choice13 = input.nextLine();
        } else {
            choice11 = "n";
            choice12 = "n";
            choice13 = "n";
        }

        System.out.print("Would you like Dutchess's Fries? ");
        choice2 = input.nextLine();
        if(choice2.compareToIgnoreCase("y")>=0){
            System.out.printf("Would you like to add %s? ", addon21);
            choice21 = input.nextLine();
            System.out.printf("Would you like to add %s? ", addon22);
            choice22 = input.nextLine();
        } else {
            choice21 = "n";
            choice22 = "n";
```

```java
            }

            System.out.print("Will you finish this order with a Marie Antoinette's Cake Shake? ");
            choice3 = input.nextLine();
            if(choice3.compareToIgnoreCase("y")>=0){
                System.out.printf("Would you like to add %s? ", addon31);
                choice31 = input.nextLine();
            } else {
                choice31 = "n";
            }
            input.close();

            System.out.println("FINAL");
            System.out.println("=======================");

            if(choice1.compareToIgnoreCase("y")>=0){
                subtotal+=price1;
                System.out.printf("%-19s$%8.2f%n",menu1,price1);
                if(choice11.compareToIgnoreCase("y")>=0){
                    subtotal+=addonPrice11;
                    System.out.printf("    %-15s$%8.2f%n",addon11,addonPrice11);
                };
                if(choice12.compareToIgnoreCase("y")>=0){
                    subtotal+=addonPrice12;
                    System.out.printf("    %-15s$%8.2f%n",addon12,addonPrice12);
                };
                if(choice13.compareToIgnoreCase("y")>=0){
                    subtotal+=addonPrice13;
                    System.out.printf("    %-15s$%8.2f%n",addon13,addonPrice13);
                };
            //System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice1, subtotal);
            }

            if(choice2.compareToIgnoreCase("y")>=0){
                subtotal+=price2;
                System.out.printf("%-15s$%8.2f%n",menu2,price2);
                if(choice21.compareToIgnoreCase("y")>=0){
                    subtotal+=addonPrice21;
                    System.out.printf("    %-15s$%8.2f%n",addon21,addonPrice21);
                };
                if(choice22.compareToIgnoreCase("y")>=0){
                    subtotal+=addonPrice22;
                    System.out.printf("    %-15s$%8.2f%n",addon22,addonPrice22);
                };
            //System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice2, subtotal);
            }

            if(choice3.compareToIgnoreCase("y")>=0){
                subtotal+=price3;
                System.out.printf("%-15s$%8.2f%n",menu3,price3);
                if(choice31.compareToIgnoreCase("y")>=0){
                    subtotal+=addonPrice31;
                    System.out.printf("    %-15s$%8.2f%n",addon31,addonPrice31);
                };
            //System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice3, subtotal);
            }

            taxToPlus = subtotal * TAX;
            total = subtotal + taxToPlus;
            System.out.printf("_____%n"+
            "%-15s$%8.2f%n"+
            "%-15s$%8.2f%n"+
            "%-15s$%8.2f%n"+
            "Thank you for being such a sophisticated individual with refined tastes%n"+
            "here at Butler Burger!",
            "Subtotal:", subtotal, "Tax:", taxToPlus, "Total:", total);




            //System.out.println(choice1.compareToIgnoreCase("y"));
```

```
            }
        }
```

Q4. Would You Like Ice Water With That?

```java
package hw_04_code;

import java.util.Scanner;

public class BongoBurgerMenu {

    public static void main (String[] args) {

        final double TAX = 0.095;

        final String menu1 = "Bongo Burger";
        final double price1 = 10.00;
        String choice1;
        int choice11=0;

        final String menu2 = "Pakora Curry Fries";
        final double price2 = 5.00;
        String choice2;
        int choice21;

        final String menu3 = "Chai Shake";
        final double price3 = 8.00;
        String choice3;
        int choice31;


        String spicy = "Spiciness Levels:\n";
        String spicyLevels = " ";
        spicyLevels = "    1.Mild + $0.00    2.%-10s + $%6.2f%n    3.%-10s + $%6.2f%n    4.%-10s + $%6.2f%n";
        spicyLevels += "    1.Medium + $%6.2f%n    2.%-10s + $%6.2f%n    3.%-10s + $%6.2f%n    4.%-10s + $%6.2f%n";
        spicyLevels += "    1.%-10s + $%6.2f%n    2.%-10s + $%6.2f%n    3.%-10s + $%6.2f%n    4.%-10s + $%6.2f%n";
        spicyLevels += "    1.%-10s + $%6.2f%n    2.%-10s + $%6.2f%n    3.%-10s + $%6.2f%n    4.%-10s + $%6.2f%n";
        System.out.print("DEBUG:\n" + spicy + spicyLevels);

        double total=0.00, subtotal=0.00, taxToPlus=0.00;


        Scanner input = new Scanner(System.in);
        System.out.println("Welcometoquickburger! Hurryup-Hurryup!");
        System.out.printf("Let's get you started!\n"+
        "We have our classic menu to choose from!\n"+
        "%-15s $%8.2f\n"+
        "%-15s $%8.2f\n"+
        "%-15s $%8.2f\n"+
        "So, would you like the Bongo Burger? ",
        menu1,price1,
        menu2,price2,
        menu3,price3
        );
        choice1 = input.nextLine();
        /*if(choice1.compareToIgnoreCase("y")>=0){
            System.out.printf("Would you like to add %s? ", addon11);
            choice11 = input.nextLine();
            System.out.printf("Would you like to add %s? ", addon12);
            choice12 = input.nextLine();
            System.out.printf("Would you like to add %s? ", addon13);
            choice13 = input.nextLine();
        } else {
            choice11 = "n";
            choice12 = "n";
            choice13 = "n";
        }*/
```

```java
System.out.print("Would you like Pakora Curry Fries? ");
choice2 = input.nextLine();
/*if(choice2.compareToIgnoreCase("y")>=0){
    System.out.printf("Would you like to add %s? ", addon21);
    choice21 = input.nextLine();
    System.out.printf("Would you like to add %s? ", addon22);
    choice22 = input.nextLine();
} else {
    choice21 = "n";
    choice22 = "n";
}*/

System.out.print("Will you finish this order with a Chai Shake? ");
choice3 = input.nextLine();
/*if(choice3.compareToIgnoreCase("y")>=0){
    System.out.printf("Would you like to add %s? ", addon31);
    choice31 = input.nextLine();
} else {
    choice31 = "n";
}*/
input.close();

System.out.println("FINAL");
System.out.println("=======================");

if(choice1.compareToIgnoreCase("y")>=0){
    subtotal+=price1;
    System.out.printf("%-19s$%8.2f%n",menu1,price1);
    /*if(choice11.compareToIgnoreCase("y")>=0){
        subtotal+=addonPrice11;
        System.out.printf("    %-15s$%8.2f%n",addon11,addonPrice11);
    };
    if(choice12.compareToIgnoreCase("y")>=0){
        subtotal+=addonPrice12;
        System.out.printf("    %-15s$%8.2f%n",addon12,addonPrice12);
    };
    if(choice13.compareToIgnoreCase("y")>=0){
        subtotal+=addonPrice13;
        System.out.printf("    %-15s$%8.2f%n",addon13,addonPrice13);
    };*/
//System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice1, subtotal);
}

if(choice2.compareToIgnoreCase("y")>=0){
    subtotal+=price2;
    System.out.printf("%-15s$%8.2f%n",menu2,price2);
    /*if(choice21.compareToIgnoreCase("y")>=0){
        subtotal+=addonPrice21;
        System.out.printf("    %-15s$%8.2f%n",addon21,addonPrice21);
    };
    if(choice22.compareToIgnoreCase("y")>=0){
        subtotal+=addonPrice22;
        System.out.printf("    %-15s$%8.2f%n",addon22,addonPrice22);
    };*/
//System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice2, subtotal);
}

if(choice3.compareToIgnoreCase("y")>=0){
    subtotal+=price3;
    System.out.printf("%-15s$%8.2f%n",menu3,price3);
    /*if(choice31.compareToIgnoreCase("y")>=0){
        subtotal+=addonPrice31;
        System.out.printf("    %-15s$%8.2f%n",addon31,addonPrice31);
    };*/
//System.out.printf("DEBUG: Because choice1 was %s, the subtotal is %f.\n",choice3, subtotal);
}

taxToPlus = subtotal * TAX;
total = subtotal + taxToPlus;
System.out.printf("_____%n"+
"%-15s$%8.2f%n"+
"%-15s$%8.2f%n"+
"%-15s$%8.2f%n"+
```

```java
            "Thank you for being such a sophisticated individual with refined tastes%n"+
            "here at Butler Burger!",
            "Subtotal:", subtotal, "Tax:", taxToPlus, "Total:", total);




            //System.out.println(choice1.compareToIgnoreCase("y"));



        }
    }
```

"Thank you for being such a sophisticated individual with refined tastes%n"+
"here at Butler Burger!",
"Subtotal:", subtotal, "Tax:", taxToPlus, "Total:", total);