In the following examples, turn the program idea into “spoken” pseudocode, then turn it into “code-like” pseudocode.

For example:

**Idea:** Pump air into a tire until it is the correct PSI (pressure per square inch)  
 **Spoken:** While the tire pressure is less than the target pressure, increase the tire pressure  
 **Codelike:** while (tire.psi < tire.targetpsi) { tire.psi++ }

## Idea #1

I want to make a program that tells you should wear a raincoat when it’s raining outside, or sunglasses in clear weather

**Spoken:** When it’s raining outside, wear a raincoat. If the weather is clear, wear sunglasses.

**Codelike:** if (outside.weather = outside.raining) {person.clothing += clothes.raincoat}; else if (outside.weather = outside.clear) {person.clothing += clothes.sunglasses};

## Idea #2

I want a program that can look at all the red, green, and blue marbles in a jar and sort them into three piles by their color

**Spoken:** If a marble is red, place it into pile #1 until all of the red marbles are in the pile. If a marble is green, place it into pile #2 until all of the green marbles are in the pile. If a marble is blue, place it into pile #3 until all of the blue marbles are in the pile.

**Codelike:** for (marble in pile) {if (marble = “red”) {pile1 ++} else if (marble = “green”) {pile2 ++} else if (marble = “blue”) {pile3 ++}};

## Idea #3

I want to make a program that can look at all of the students’ grades for an assignment, and change all of the grades marked as “missing” to “0”

**Spoken:** If an assignment is marked as “missing”, change the grade to a “0”.

**Codelike:** for (studentGrade in assignment) {if (studentGrade == “missing”) {studentGrade = 0}};

## Idea #4

I want to make a Raspberry Pi script that checks for a button presses repeatedly and changes the count of students in the bathroom depending on which button they press (increase students if it’s the first button and decrease students if it’s the other button)

**Spoken:** If the first button is pressed, then increase the number of students in the bathroom by 1. If the second button is pressed, then decrease the number of students in the bathroom by 1.

**Codelike:** if (button1.pressed = true) {bathroom.students ++} else if (button2.pressed = true) {bathroom.students --};

## Idea #5

I want my Discord bot to cyberbully anyone in the list of server occupants if their profile says they are playing “Genshin Impact” right now.

**Spoken:** If a person’s Discord profile displays that they are playing “Genshin Impact”, send hideous messages to them.

**Codelike:** if (profile.game == “Genshin Impact”) {message(badThings)};

## Idea #6

I want a program that will check your five lottery numbers, and tell you if you won or lost depending on whether all five numbers match five drawn numbers or not.

**Spoken:** If your five lottery numbers are winning numbers, tell the winner that they won. If the numbers are not winning numbers, tell the user that they lost.

**Codelike:** if (lotteryNumbers == winningNumbers) {console.log (You Win! Perfect!)};