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: If it is rainy wear raincoat otherwise if it’s sunny wear sunglasses.**

**Codelike:**

**If (weather == rainy) you.clothes = ‘raincoat’;**

**Else if (weather == sunny) you.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: for all marbles if marbles is red put in red marble pile, if marbles is green put in green marble pile, if marbles is blue put in blue marble pile**

**Codelike:**

**for (marble in marbles) {**

**if (marble.color == ‘red’) {**

**redPile.push(marbles[marble])**

**marbles.pop(marble)**

**} else if (marble.color == ‘green) {**

**redPile.push(marbles[marble])**

**marbles.pop(marble)**

**} else if (marble.color == ‘blue) {**

**redPile.push(marbles[marble])**

**marbles.pop(marble)**

**}**

**}**

## 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: For all students and assignments if assignment is missing make it 0**

**Codelike:**

**for (student in students) {**

**for (assignment in students[student]) {**

**students[student][assignments].grade = 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 increase button pressed add one student to bathroom, if decrease button pressed remove one student from bathroom repeat forever**

**Codelike:**

**while (true) {**

**if (buttons.increase == pressed) {**

**bathroom.students ++;**

**buttons.increase = notPressed;**

**}**

**if (buttons.decrease == pressed) {**

**bathroom.students --;**

**buttons.decrease = notPressed;**

**}**

**}**

## 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: for all discord users if discord user is playing Genshin Impact send Genshin Impact is a bad game repeat forever**

**Codelike:**

**while (true) {**

**for (user in discord.users) {  
 if (discord.users[user].game == ‘Genshin Impact’)**

**discord.send(discord[user], ‘Genshin Impact is a bad game’)**

**}**

**}**

## 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 lottery numbers equals drawn numbers**

**Codelike:**

**If (you.lotteryNumber == lottery.numbers) console.log(‘You won the lottery!’)**