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: While the weather is rainy, wear a raincoat. While the weather is clear, wear sunglasses.**

**Codelike: while (weather == rainy) {clothing.worn = raincoat};**

**while (weather == clear) {clothing.worn = 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: while the jar still has marbles, pull out one marble, check its color, and put it in a jar filled with that color.**

**Codelike: while (jar.all != empty) {jar.all -= 1; marble = Math.floor(Math.random() \* 2) + 1;**

**if (marble == 1) {jar.red += 1} else if (marble == 2) {jar.blue += 1}**

**else if (marble == 3) {jar.green += 1}}**

## 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 every students’ grade, check them one by one and set any of them that are missing to 0**

**Codelike: for (student.grade in assignment.1) {if (student.grade == “missing”) {student.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: while the script is running, check to see if the buttons are pressed. If the first button is pressed, add 1 student to the total number of students in the bathroom. If the second button is pressed, subtract 1 from the total number.**

**Codelike: while true: if button1 == pressed: studentsinbathroom += 1**

**If button2 == pressed: studentsinbathroom += 1**

## 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: Check everyone’s profile status. If their profile status says they’re playing “Genshin Impact”, then put them in a list to have the discord bot to cyberbully them.**

**Codelike: botbullylist = []**

**For (person in server) {if (person.status == “Genshin Impact”) {botbullylist.push(person)} else {pass}}**

## 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 first number matches the first drawn number, and so on for the next 4, then you win.**

**Codelike: your#1 = Math.floor(Math.random() \* 68) + 1**

**your#2 = Math.floor(Math.random() \* 68) + 1**

**your#3 = Math.floor(Math.random() \* 68) + 1**

**your#4 = Math.floor(Math.random() \* 68) + 1**

**your#5 = Math.floor(Math.random() \* 68) + 1**

**lottery#1 = Math.floor(Math.random() \* 68) + 1**

**lottery#2 = Math.floor(Math.random() \* 68) + 1**

**lottery#3 = Math.floor(Math.random() \* 68) + 1**

**lottery#4 = Math.floor(Math.random() \* 68) + 1**

**lottery#5 = Math.floor(Math.random() \* 68) + 1**

**if (your#1 == lottery#1 && your#2 == lottery#2 && your#3 == lottery#3 && your#4 == lottery#4 && your#5 == lottery#5) {console.log(“YOU WIN!”)}; else {console.log(“You didn’t win…)}**