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’s raining outside, wear a raincoat.

if it’s clear outside, wear sunglasses

**Codelike:** if (weather.raining == true); wearRaincoat = true;

else if (weather.raining == false); wearSunglasses = true;

## 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 there are marbles in a jar, put all the red marbles in a jar, the blue marbles in another jar, and the green marbles in another jar.

**Codelike:** marbleJar = [red, blue, green]

redMarbles = []

blueMarbles = []

greenMarbles = []

while (marbleJar == true) {

for (marble in marbleJar) {

if (marble == red) {

redMarbles.append(marble) };

else if (marble == blue) {

blueMarbles.append(marble) };

else if (marble == green) {

greenMarbles.append(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:** while the students have missing assignments, change the “missing” to a “0”

**Codelike:** while (students.assignments == “missing”) {

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:** while a button is pressed, change the number of students in the bathroom. If the first button is pressed, increase the students. If the second button is pressed, decrease the students.

**Codelike:** while (button.pressed == true) {

if (button.pressed == 1) {

students += 1 };

if (button.pressed == 2) {

students -= 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:** if someone’s profile says they’re playing “Genshin Impact,” bully them.

**Codelike:** if (personPlaying.game == “Genshin Impact”) {

bullyPerson = true };

## 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 all 5 lottery numbers match someone’s card, tell them they won

**Codelike:** if (lottery.numbers == winning.numbers) {

console.log(“You won”) };

else if (lottery.numbers != winning.numbers) {

console.log(“You lost”) };