

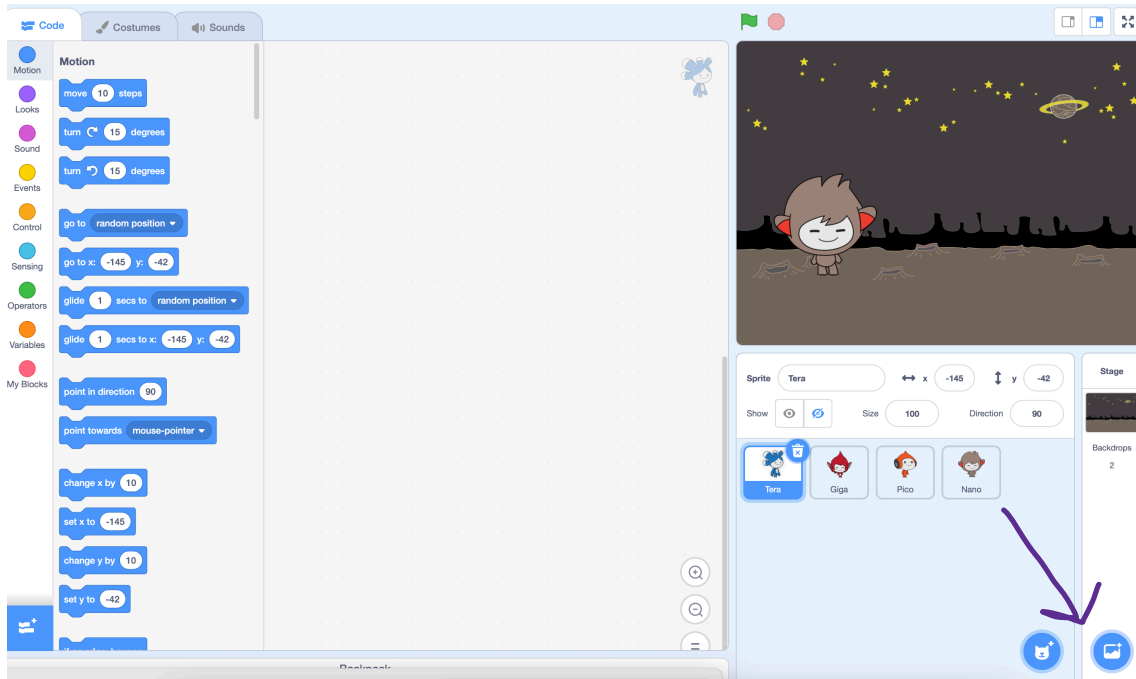
## GCC Chatbot Instructions

Open the scratch project by copying this link into the search bar:

[rpf.io/chatbot-on](https://rpf.io/chatbot-on)

### Customizing the worldview

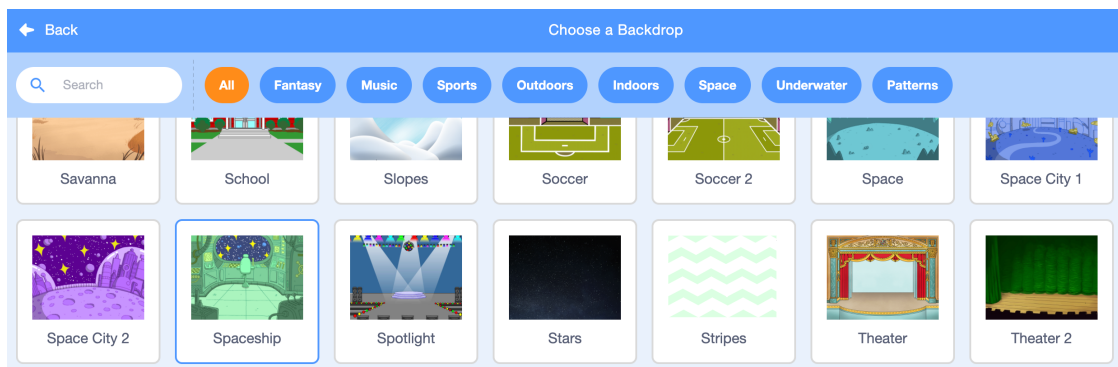
1. In the bottom right corner, click the “Choose a Backdrop” icon.



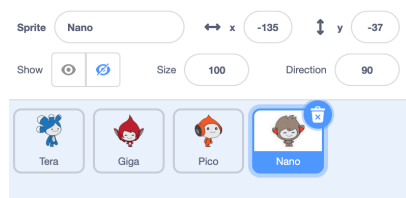
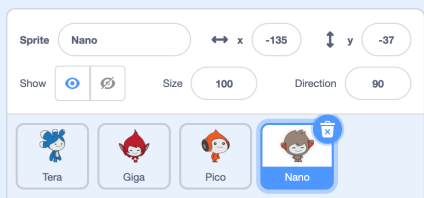
This will take you to a list of backgrounds. Practice changing the backdrop by choosing TWO places you would like to go. Click each background to try it out!

Write down the name of your places here: \_\_\_\_\_ and \_\_\_\_\_

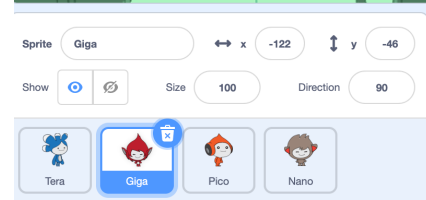
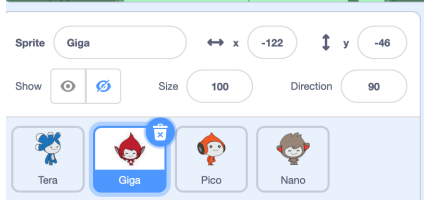
After you’ve picked your favorite places, scroll down and change the background to “Spaceship”. This will be your magic spaceship for traveling to all sorts of fun places!



2. Now, you can choose which character (in Scratch, they’re called sprites) you’d like to be your travel guide for this adventure. To change the character from Nano, first click on Nano and then hide Nano by clicking the “eye closed” button. Click on the character of your choice and click the “eye open” button to make them appear!



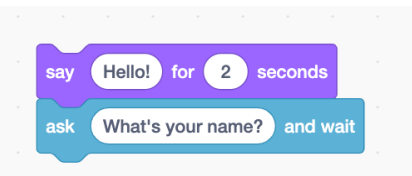
Then



### Creating a simple program

- Now it's time to add some code! In the "Code" tab on the left, there are many colorful pieces with different commands written on them. Add a block of code (by finding the commands on the menu to the left and dragging them into your program) that (1) says "Hello!" for 2 seconds and (2) asks "What's your name?". This is done by adding a purple "say \_\_\_\_ for 2 seconds" piece and a teal "ask \_\_\_\_ and wait" piece.

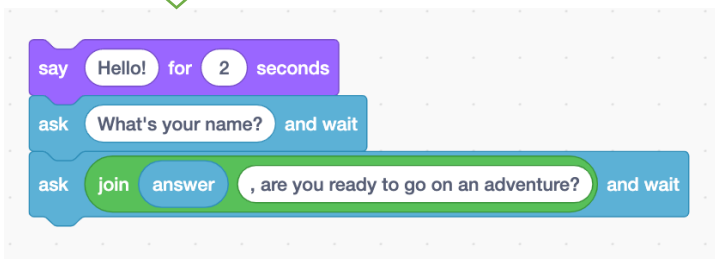
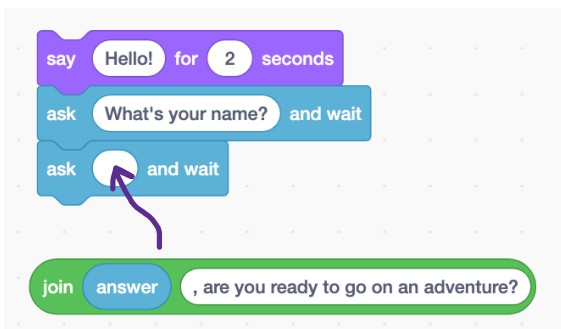
The code will look like this:



## Chatting with your chatbot

To run your code, click on your block of code until there is a yellow outline around it. On the right, you should see your adventure guide say “Hello!” and ask for your name. To stop the code from running, click the red stop sign in the top bar. This will pull up a text box you can type your answer into. This answer is stored in a variable called “answer” that you will use in the next step.

4. Your chatbot is a friendly robot and would like to use your name to address you in the next quest.
  - a. First, we need to create a question. Add a new teal “ask ‘What’s your name?’ and wait” piece to your block. You’ll notice that the default says, “What’s your name?”, but this time we’d like to ask a different question, so delete “What’s your name?” and leave the bubble empty.
  - b. For the program to address you by name, you will have to join the name you typed in (answer) to the question, “Where would you like to go?” To do this, you’ll need to choose the green “join” bubble (in the list of commands, you will see that it says “join (apple) (banana)”. You can delete the words “apple” and “banana”.
  - c. Into the left spot of the green “join” bubble, you’ll want to find and add the blue “answer” bubble. On the right side of the green “join” bubble, you’ll need to type: “are you ready to go on an adventure?” Then, drag the whole green “join” bubble into the “ask” piece.

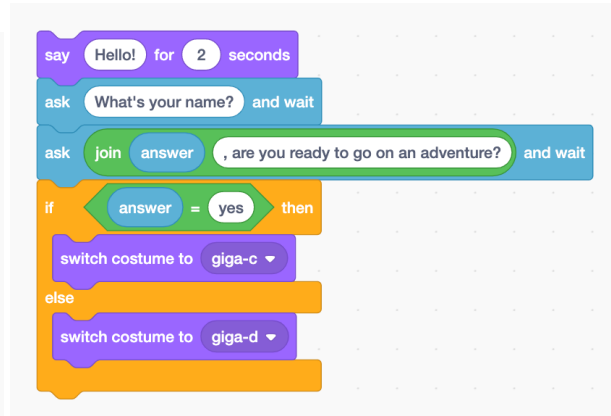
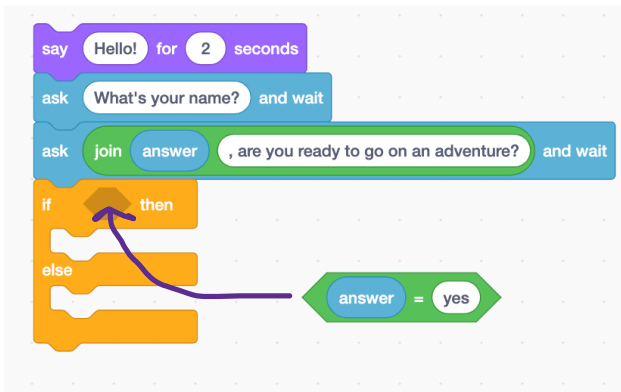


At this point, it’s a good idea to run your program by clicking the green flag. See if the question bubble pops up with your chatbot. If so, that’s awesome! If not, that’s okay, too! Just go through Step 4 again and try to find where things went wrong. This process is called *debugging*, and all coders debug their code.

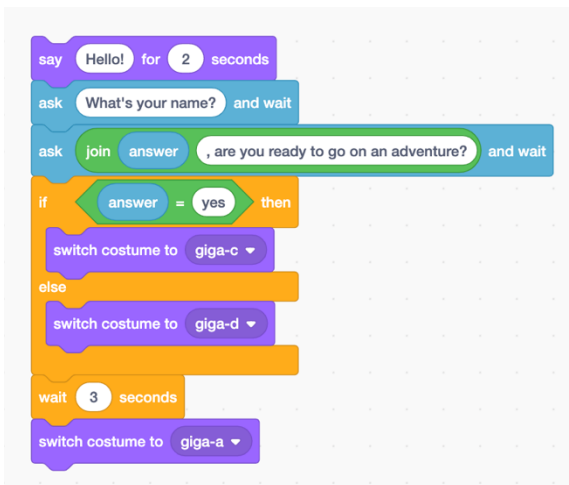
5. The user will type “yes” or “no” into the box. Have your character react to the answer that is typed. If the user says “yes”, then our adventure guide will smile! If the user says anything else, the adventure guide will frown. To do this, we’ll use an if/else statement!

- a. First, add an orange if/else piece.
- b. Next, drag a green diamond equal sign operator into the space next to “if” (In the commands it will say “\_\_\_\_\_”=”50”). Delete the “50”.
- c. Inside the statement, we want to see if the teal “answer” bubble is equal to “yes”. To do this, drag the teal answer bubble into the left space.

- d. Finally, type the word “yes” into the right space.
- e. To change the face of your adventure guide, add two purple “switch costume” pieces to the gaps between the if and else statements.
- f. For the first option, to make the character smile, change costume to <name>-c where <name> is the name of your adventure guide.
- g. For the second option, to make the character frown, change the costume to <name>-d, where <name> is the name of your adventure guide.



6. At the end, add a piece to wait 3 seconds and another piece to return the character’s face to how it was before (<name>-a).



Pause! Take some time to run your code before moving on to the next part. Remember that it’s okay if it doesn’t run perfectly on the first try. Just go back and check your code and try to *debug* it. Don’t be afraid to ask for help from your new friends and from the volunteers.

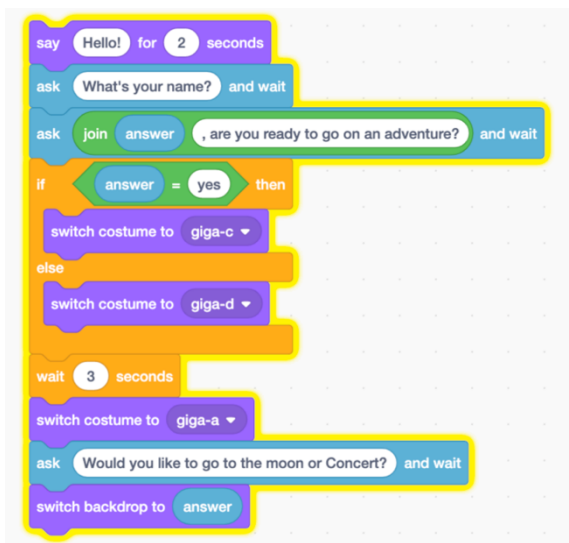
Now, using what you’ve learned, can you write a program to make the character go to one of the places you picked at the beginning? First, you’ll need to make the chatbot ask which of the two places you’d like to go. Then, find and add the “switch background to \_\_\_\_” command to change chatbot’s location. Hint: You’ll need to use the “answer” variable we’ve used before.

## Changing chatbot's location

1. Add a new question piece and type "Would you like to go to <Place 1> or <Place 2>?" Here, <Place 1> and <Place 2> are the two places you picked in #1. Be sure to type them exactly how they look in the background list. Make sure the capital and lowercase letters match.
2. Then switch the background to the one chosen by the user, add a purple "switch backdrop" piece and add a teal "answer bubble". Your code should now look something like this:



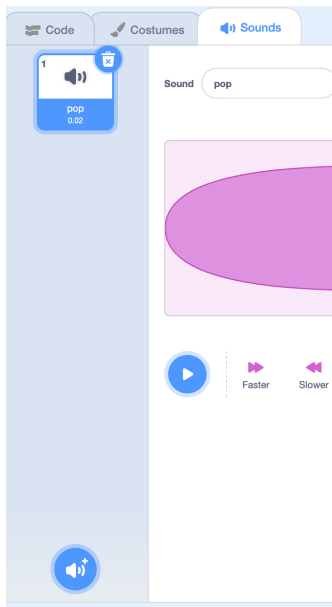
Time to test the code you've written so far by clicking the green flag!



If something didn't go as planned, that's okay! Try to find out what's not working and *debug* your code. Together, we can figure out how to fix it!

### Adding sound!

- Now that you're at one of the really cool places you decided to go, let's have some fun while we're here! To start the party, let's add some sound. Click the "Sounds" tab on the left. Then click, "Choose a sound".



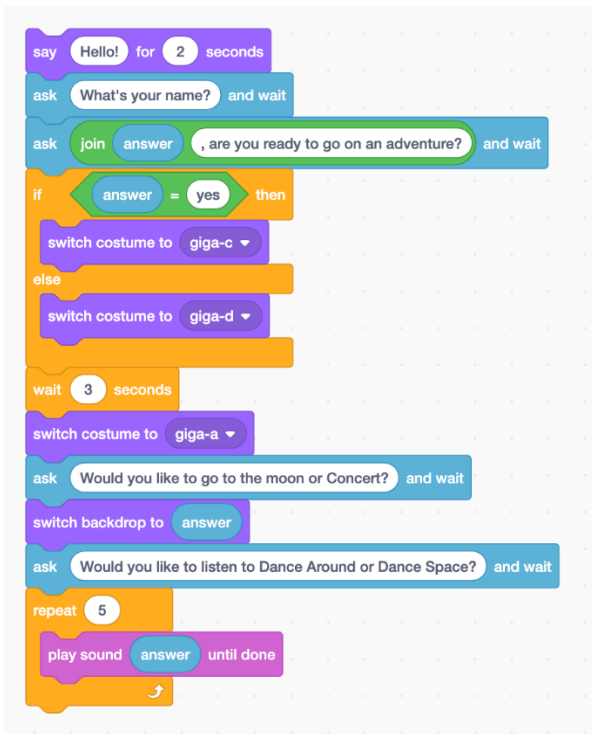
Pick two sounds you like the best. Write them down here.

\_\_\_\_\_ and \_\_\_\_\_

You should see your two new sounds appear under the default "pop".

- Return to the "Code" tab. Add a new question piece and type "Would you like to listen to <Sound 1> or <Sound 2>?" Here, <Sound 1> and <Sound 2> are the two sounds you picked in #8. Be sure to type them exactly how they look in the "Sounds" list.
- Add an orange "repeat" piece. Change the number of repeats to 5. Inside the "repeat" piece, add a purple "play sound" piece. Then add your teal "answer" bubble after the words "play sound". Instead of making 5 copies of the "play sound" piece, the "repeat" piece is a loop that plays the sound the number of times you choose (here, 5).

Your code will now look like this:

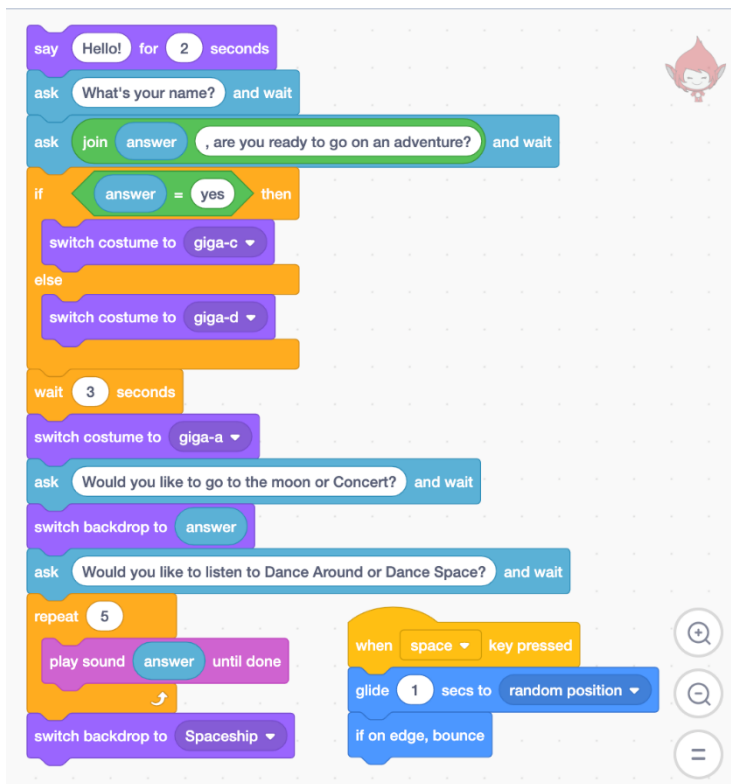


## Dancing with chatbot!

- We also want our adventure guide to dance to the sound we picked! To do this, we need to add a second block of code next to our first block. In this block, add an orange “when space is pressed” piece. Below it, add the following two blue pieces: (1) “glide 1 secs to random position” and (2) “If on edge, bounce”. Because it doesn’t connect to the other code, this block of code will only work when you press the spacebar. When the music starts to play, press the spacebar as many times as you’d like to make your adventure guide dance!



7. Now it's time to go home. When your music has stopped and your adventure guide is done dancing, add a piece to your original code that changes the background back to the Spaceship. Your final code will look like this.



Great job! You completed your first coding adventure!