# GSIT Quest #1 Solution
By Alaina, Brianna and Sara

Our favorite challenge was 3 because we liked using the sensor. We brought in a camping lamp and used cell phone flashlights to see how it affected the brightness and reading from the sensor. We found out the room wasn't that bright so we used the camp light to make it brighter.

PINK PARADISE FLAMINGOS
GIRLS SOLVE IT

Challenge 1

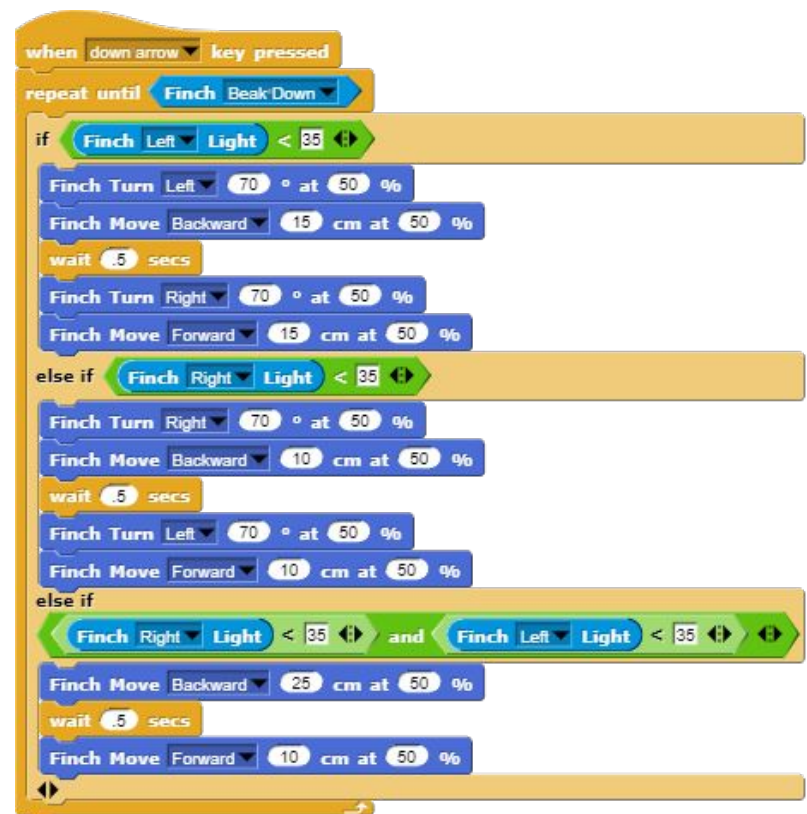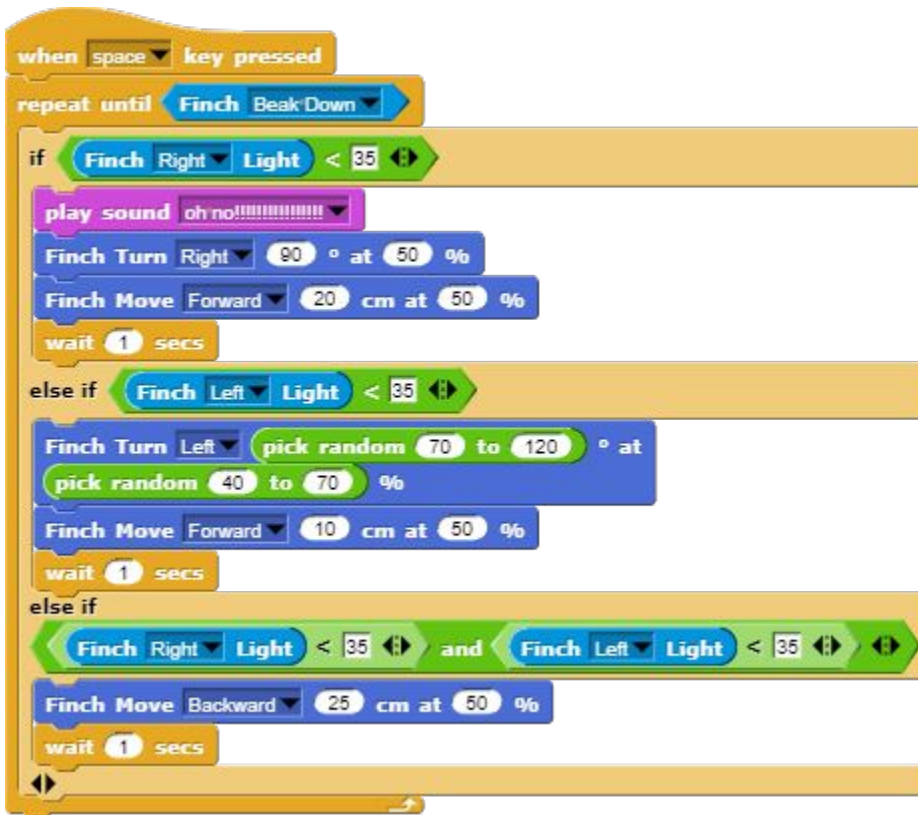This was easy - we just turned different Finch lights on and waited.
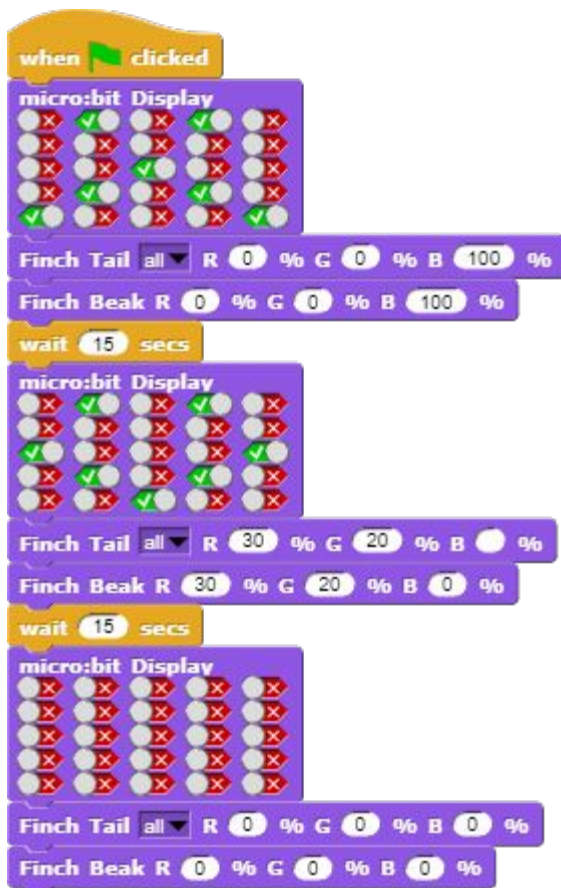
Challenge 3

We used if and else if to make sure all three cases are found. If the right or left light sensors get blocked, Finch turns away and backs up to escape. If both light sensors are blocked Finch goes straight back. We went forward after to not fall off the table.

Challenge 2

This was kind of confusing but we worked backwards and decided we wanted Finch to move 60 cm on the table. That meant that we needed to divide the total miles by about 11.2. So we set miles to that and then set centimeters to miles. In the video the marker was down but caught on the paper and messed up our path so we didn't go the full 60cm but with no marker it always went the full distance.

Bonus 1

We have changed one of the turns to be random. We could have changed them all but ran out of time. We did add a fun sound as seen in the video!

```
when space key pressed
repeat until  Finch Beak Down
    if  Finch Right Light < 35
        play sound oh no!!!!!!!!!!!!!!!
        Finch Turn Right 90 ° at 50 %
        Finch Move Forward 20 cm at 50 %
        wait 1 secs
    else if  Finch Left Light < 35
        Finch Turn Left (pick random 70 to 120) ° at (pick random 40 to 70) %
        Finch Move Forward 10 cm at 50 %
        wait 1 secs
    else if
        (Finch Right Light < 35)  and  (Finch Left Light < 35)
        Finch Move Backward 25 cm at 50 %
        wait 1 secs
```

Bonus 2

We took our original code and just divided it by four and then ran it four times so we go the full distance in the end. We set the speed to slow down as we got closer. We didn't run with the marker on purpose because we wanted to show that we can go the full distance if the marker isn't messing up our path.

```
when  clicked
set miles to 11.2
set centimeters to (miles)
set total miles to 670
set distanceCM to (total miles) / (centimeters)
Finch Move Forward (distanceCM) / 4 cm at 89.9 %
Finch Move Forward (distanceCM) / 4 cm at 70 %
Finch Move Forward (distanceCM) / 4 cm at 50 %
Finch Move Forward (distanceCM) / 4 cm at 30 %
```