

Name(s) \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

# Activity Guide - App Exploration



In this activity, you're going to figure out what sorts of inputs a computer (in this case, a smartphone) would need in order to solve various problems. In the four challenges below you will look at data in Code Studio.

## Challenge 1: Is it Halloween?

**Check out the Data:** Level 3 in Code Studio

**Version 1:** This software addresses the problem of needing to know whether it is Halloween. It will check the date and tell the user whether or not it's Halloween.

Input Type	Information

What output should the software produce?

**Advanced Version:** The advanced version will tell the user how many days there are until Halloween.

Do you need any new inputs to the advanced program? If so, what are they?

What output should the software produce?

## Challenge 2: Ring Silencer

**Check out the Data:** Level 4 in Code Studio

**Version 1:** This app addresses the problem of someone's cell phone ringing in class. It should be able to figure out when the phone is at a school, and turn the ringer off during that time, but turn it back on when the user leaves school.

Input Type	Information

What output should the program produce?

**Advanced Version:** The advanced version is more specific. It should be able to figure out when the phone is at a school, but it should only turn off the ringer when the user is quiet and not moving. If the user is moving around or making a lot of noise, it will assume that it is not class time and keep the ringer on.

Do you need any new inputs to the advanced program? If so, what are they?

# Activity Guide - App I/O



## Challenge 3: What to wear?

**Check out the Data:** Level 5 in Code Studio

This app addresses the problem of not knowing what to wear in the morning. Look through the different inputs available to you, and decide which ones will help to determine the output to the user. Circle any inputs that you think should be stored in the phone for later.

Input Type	Information

Describe a way you could improve this app.

What new inputs would you need to make this improvement?

## Challenge 4: Movie Recommendations

**Check out the Data:** Level 6 in Code Studio

This piece of software addresses the problem of not knowing what movies to watch. Look through the different inputs available to you, and decide which ones will help to determine the output to the user. Circle any inputs that you think should be stored in the phone for later.

Input Type	Information

Compare your method, and the inputs it needed, to another group's method. What are the advantages and disadvantages of each? How might you combine your ideas to make a better app?