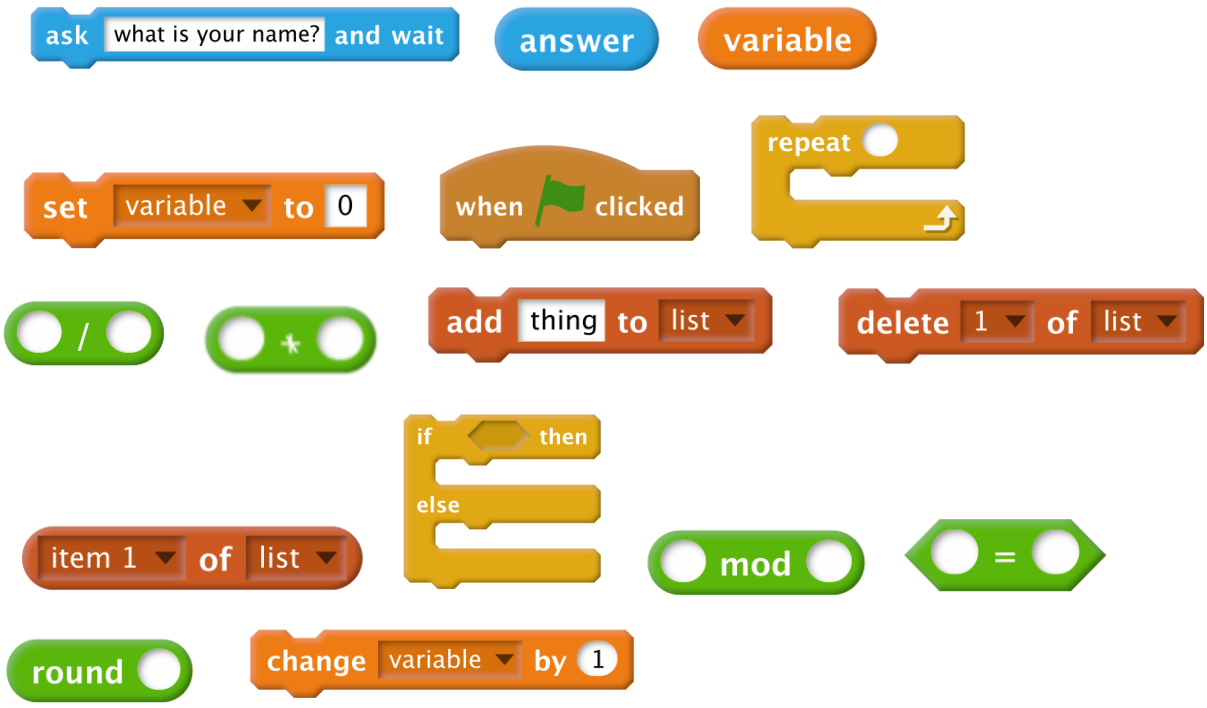
Measures of Central Tendency: Mean, Median, and Mode

Project Goal:
Given a data set, this program should calculate the mean, median, and mode of the data.

Standard: CCSS.MATH.CONTENT.6.SP.B.5.C
Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

Blocks:

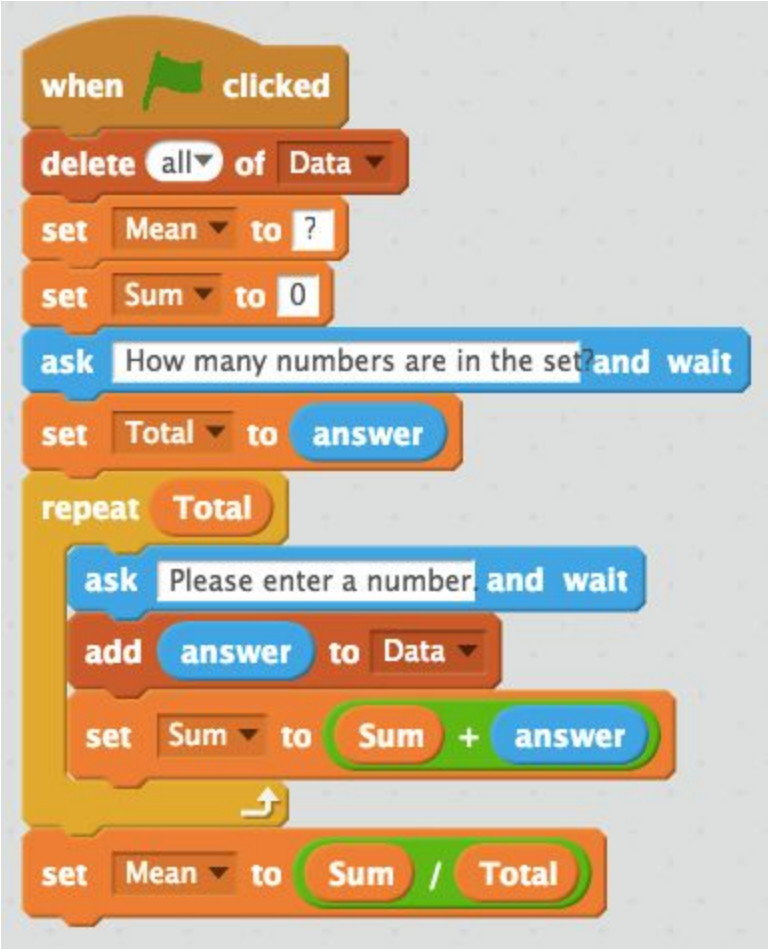


Student Handout: Measures of Central Tendency Student Guide

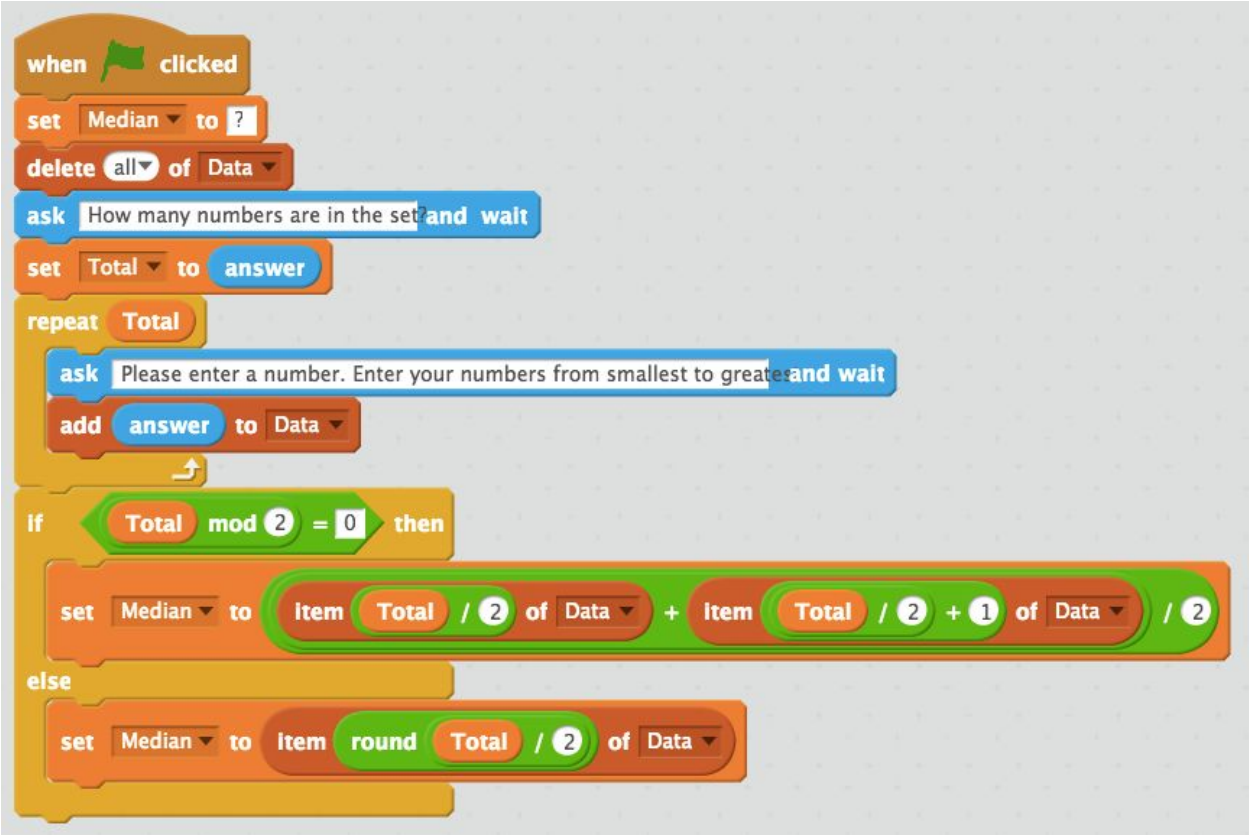
Teacher Guide: Step-by-Step Teacher Guide

Solution:

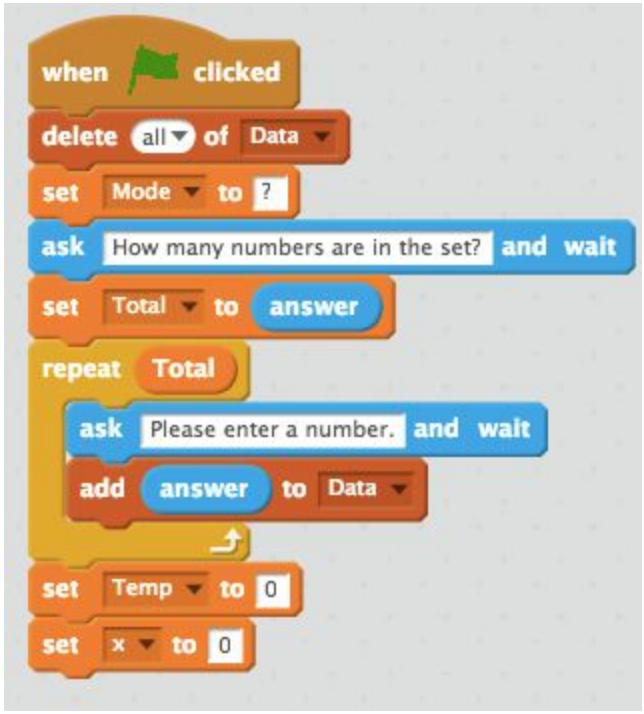
Part 1: Mean

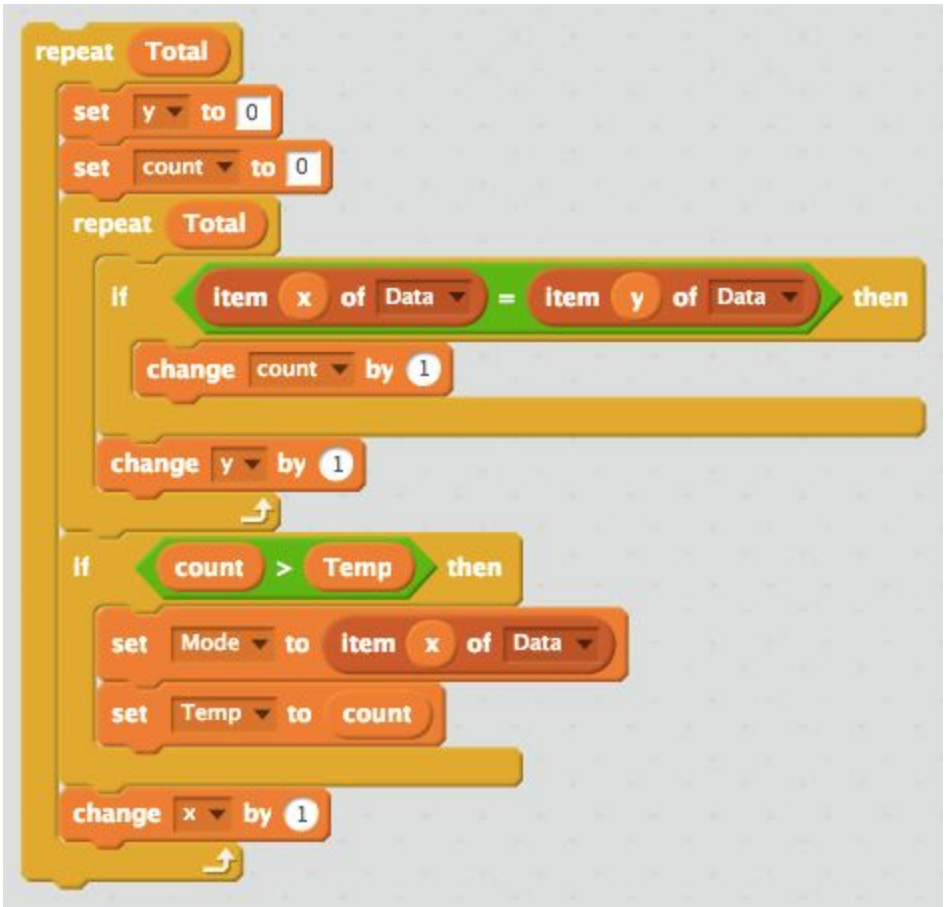


Part 2: Median



Part 3: Mode


when clicked
delete all of Data
set Mode to ?
ask How many numbers are in the set? and wait
set Total to answer
repeat Total
ask Please enter a number. and wait
add answer to Data
set Temp to 0
set x to 0


repeat Total
set y to 0
set count to 0
repeat Total
if item x of Data = item y of Data then
change count by 1
change y by 1
if count > Temp then
set Mode to item x of Data
set Temp to count
change x by 1