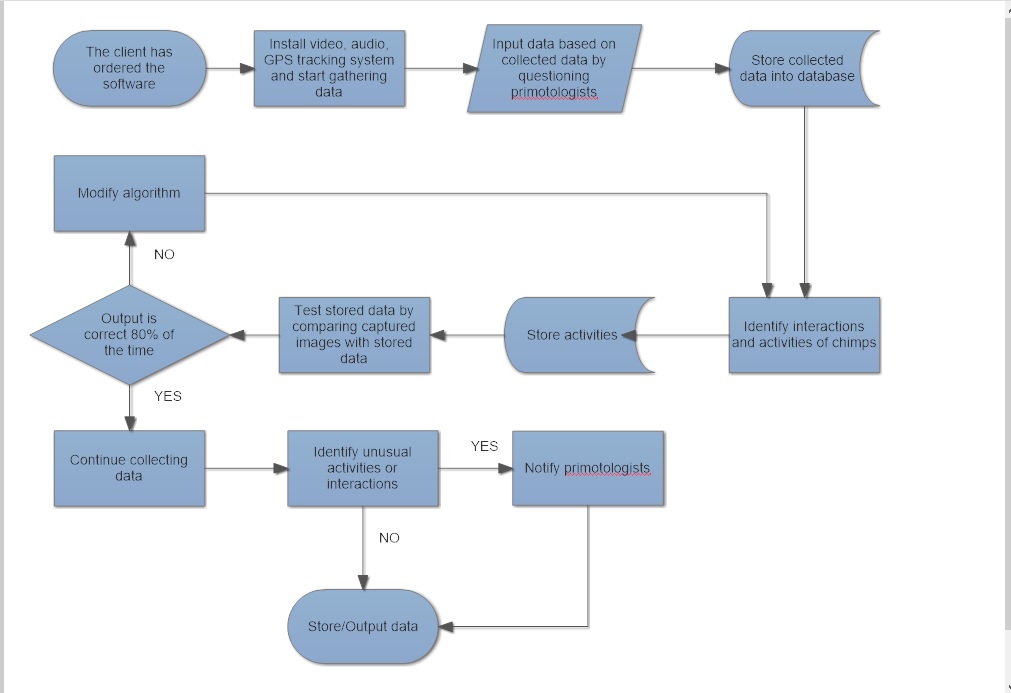
**Lab 1**

1. **A)**



The client has ordered the software which will to study the details of the daily activities and interactions of 6 chimpanzees. Will design software which will gather data by video and audio recording activities of chimps and will identify each activity or interaction by captured images and sounds. Also program will notify primatologists if any unusual activity is noticed (ex. Chimp did not each for whole day, not moving for a long time, acting too aggressively to each other, etc.).

* Firstly in order to “bar-code” each chimp GPS bracelets (tracking system) need to be installed.
* Install video, audio and GPS tracking system in order to gather data
* Work with primatologists in order to identify each interaction which was recorded by questioning them.
* Store data that was collected from primatologists (add specifications for each movement done by chimps)
* On the next step software will try to identify each interaction and activity in real time (ex. Will capture the image, save time and add description what chimps is doing at the moment)
* After storing the data will test the software for correctness. Show primatologists records that been made by software and compare it with video record.
* If output was correct 80% of time, continue recording and identifying activities by adding some extra features, if output was not correct 80% of time will need to modify algorithm and add more specifications which will help software identify chimps activities more accurately.
* If any unusual activity is noticed primatologists will be notified immediately (chimp is not moving, not eating etc.)
* Store all gathered data and outputs.

**B)**

odd\_man\_out (input array numbers)

temp <- number[0];

for each element i in the array of numbers

temp <- temp XOR numbers[i];

endfor

return temp;