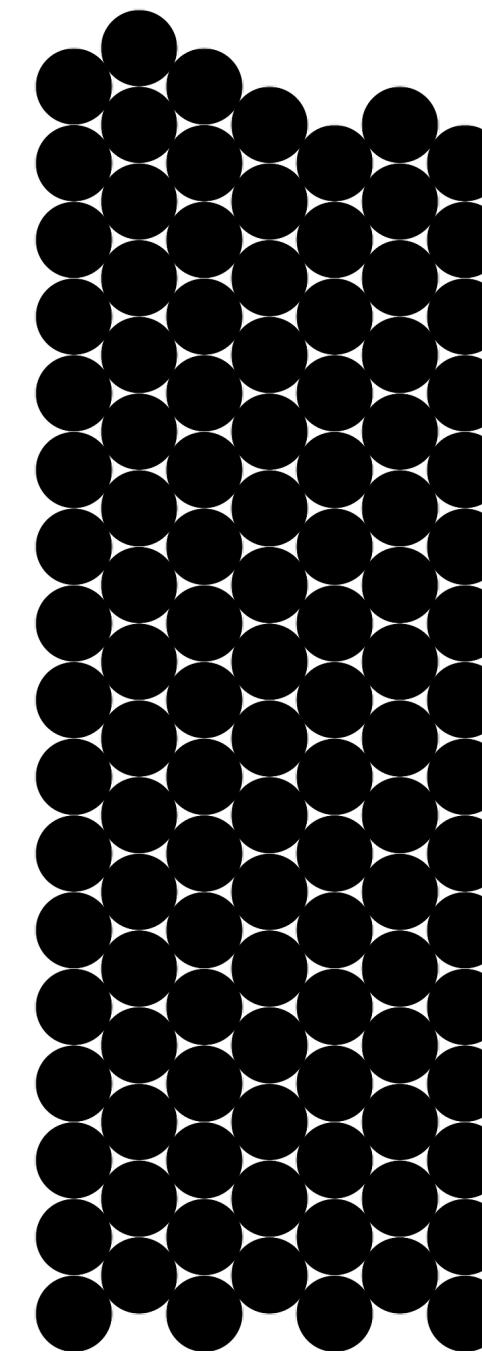
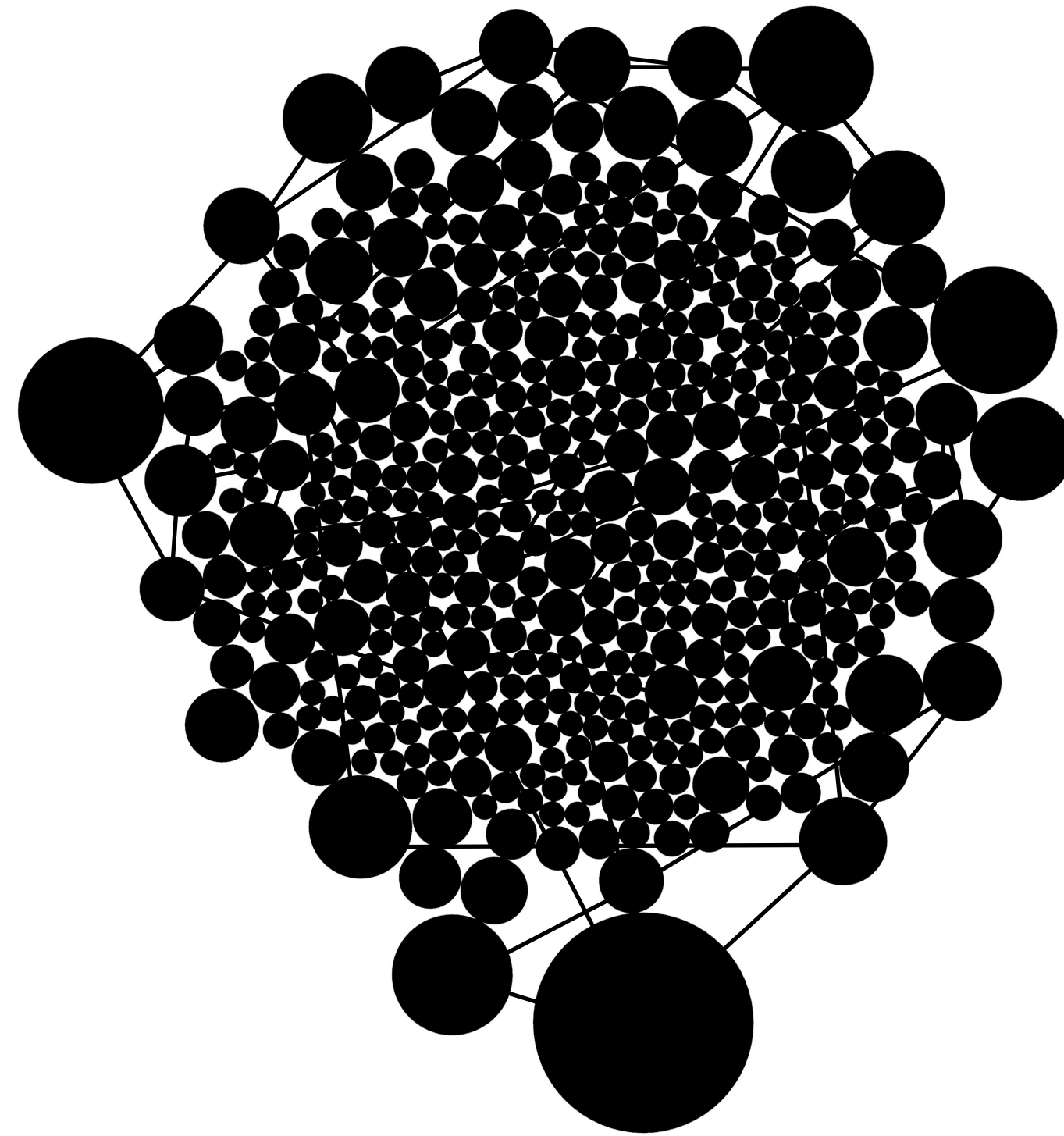


Essential Computing 1

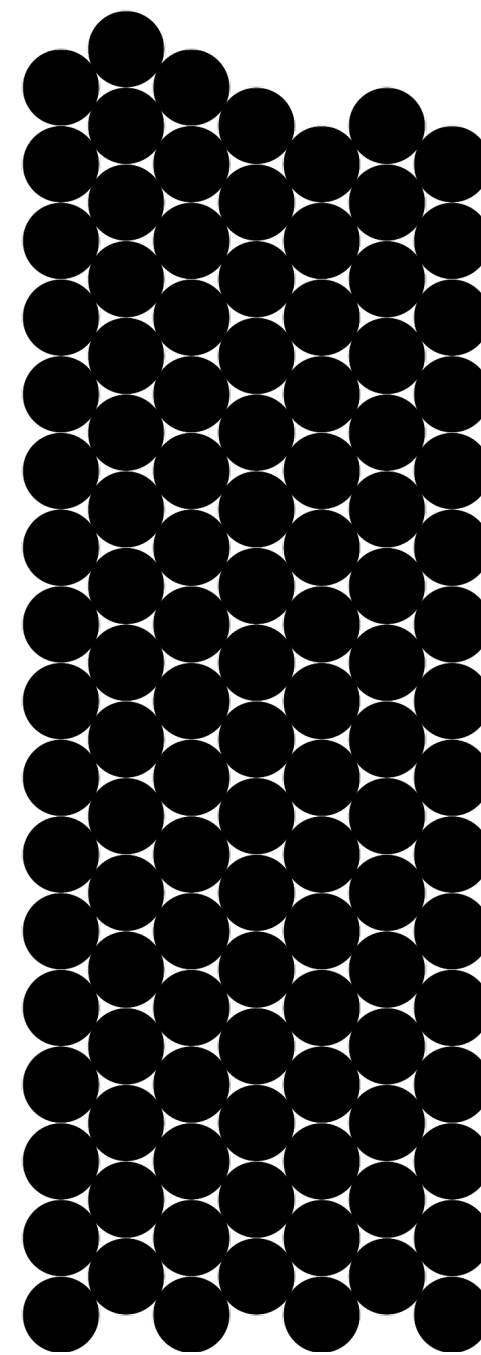
# Garbage collection



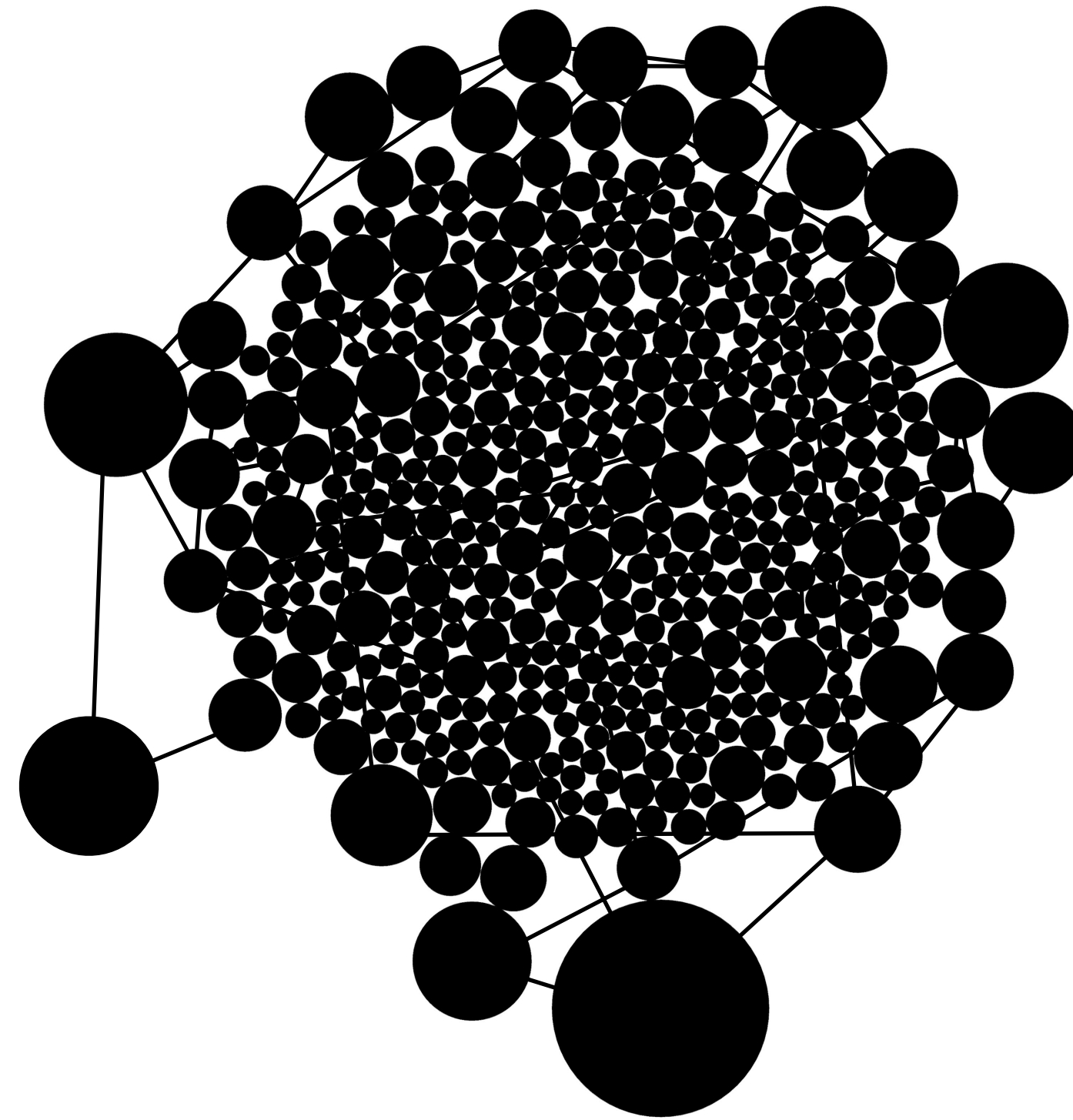
Memory is maintained in **heap and stack**



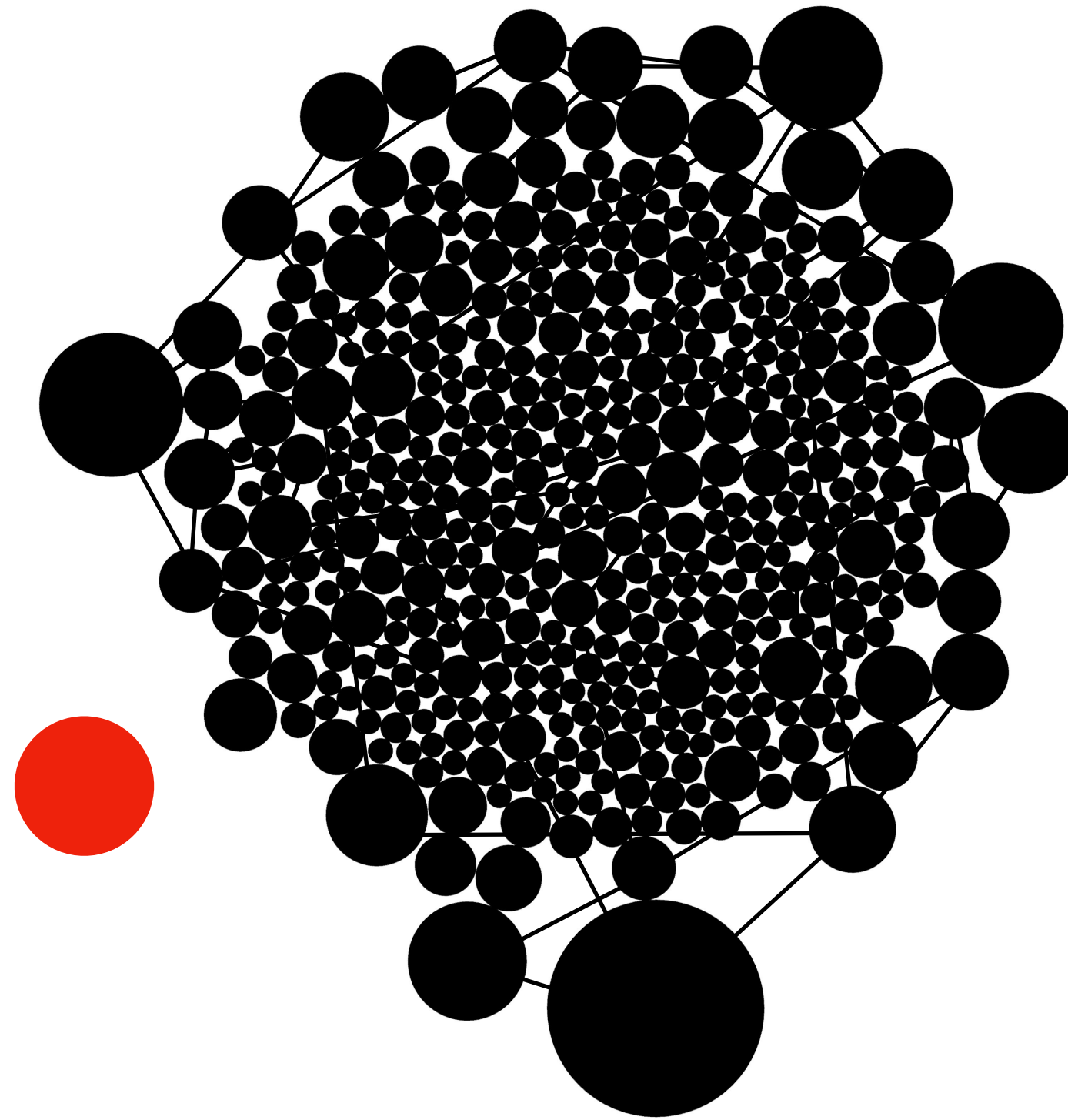
The **stack** contains short lived values and references to objects



The **heap** contains objects and their data



All references to an object (or group of objects) need to be removed before the memory can be freed



# To reduce garbage collector work

- Use "object pooling". Create a bunch of objects once and reuse them.
- Use the StringBuilder class to combine strings.
- Set capacities in classes that have them (ArrayList).