

Procedures: Conceptualize

Topics

Procedures, Procedural Abstraction

Discussion Questions

These questions concern the Logo 1 app which can be opened into App Inventor with the link:
ai2.appinventor.mit.edu/?galleryId=5222319220326400

The app has a *forward* procedure which draws a line of length 20 pixels and a *turn* procedure which turns the Android man (the drawer) 90 degrees to the right.

1. Explain how “brushing your teeth” is an abstraction.
2. Can you use the existing *forward* and *turn* procedures to draw a rectangle with sides of 35 pixels? Why or why not?
3. Can you use the existing *forward* and *turn* procedures to draw a triangle? Why or why not?
4. Say you wanted to draw 10 squares of different sizes. How would you program it? Why is the process laborious? How could things be designed differently?
5. How can procedures eliminate redundancy (copies of blocks) in an app? Provide an example from one of your drawings (e.g. drawFace)
6. How do procedures (and abstraction) make an app easier to understand and talk about?