1. You can take a screenshot on most Android devices by pressing the power button and the volume down button at the same time and then emailing the photo from the gallery to yourself, or uploading the image to Google Drive.
   1. Insert a screenshot from your device of your app's face drawing.
   2. Insert a screenshot of the AppInventor code that creates the face drawing and includes the procedure and loop.
2. Describe in general what the drawFace procedure does.
3. Describe how the drawFace procedure contributes to the overall functionality of the program.
4. Explain in detailed steps how the algorithm implemented in your drawFace procedure works. Your explanation must be detailed enough for someone else to recreate it.
5. What weaknesses do you find in using the procedures (the abstractions) we gave you -- forward, turn -- for drawing simple shapes? How would you change the definitions of these procedures to make it easier to draw shapes? Give a specific example that illustrates how a more powerful set of procedures would improve things.

**Portfolio Reflection Questions**

**Make a copy** of this document in your Portfolio Assignments folder and answer these questions in the spaces below. Once complete, turn in this assignment according to the steps given by your teacher.

[4.4 Logo Part I Curriculum Page](https://runestone.academy/runestone/books/published/mobilecsp/Unit4-Animation-Simulation-Modeling/Logo-Part-I.html)

Answer the following questions:

1. You can take a screenshot on most Android devices by pressing the power button and the volume down button at the same time and then emailing the photo from the gallery to yourself, or uploading the image to Google Drive.

1. Insert a screenshot from your device of your app's face drawing.
2. Insert a screenshot of the AppInventor code that creates the face drawing and includes the procedure and loop.

**Answer**

| Insert your face screenshot here |
| --- |
| Insert your face drawing code here |

2. Describe in general what the drawFace procedure does.

**Answer**

|  |
| --- |

3. Describe how the drawFace procedure contributes to the overall functionality of the program.

**Answer**

|  |
| --- |

4. Explain in detailed steps how the algorithm implemented in your drawFace procedure works. Your explanation must be detailed enough for someone else to recreate it.

**Answer**

|  |
| --- |

5. What weaknesses do you find in using the procedures (the abstractions) we gave you -- forward, turn -- for drawing simple shapes? How would you change the definitions of these procedures to make it easier to draw shapes? Give a specific example that illustrates how a more powerful set of procedures would improve things.

**Answer**

|  |
| --- |