

Lesson 77: Picture Lab #2 (W25D3)

Balboa High School

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Do Now

- Have your solutions to the A4 HW exercises ready to be checked. These are the methods that you needed to write:
 - `getCount()` (2pts)
 - `getLargest()` (2pts)
 - `getColTotal()` (2pts)
- Read §A5 (p10) in the [student manual](#). Make sure you understand the UML class diagram's HAS-A relationships (e.g., a `SimplePicture` object has one or more `Pixel` objects).
- Answer questions 1-7 on p11, recording your answers.

Aim

Students will gain more experience with 2D arrays and learn about digital images via the College Board's *Picture Lab*.

Solutions to the A4 Exercises

Let's go over the solutions to §A4: [teacher-only link](#).

A5: Modifying a Picture

Solutions to questions 1-7 (p11):

A5Q1	No, this class inherits it from SimplePicture.
A5Q2	Yes, SimplePicture implements the interface DigitalPicture and provides the method bodies for all the methods defined in DigitalPicture.
A5Q3	No, because DigitalPicture is an interface; an object of that type cannot be created.
A5Q4	Yes, a SimplePicture is a kind of DigitalPicture.
A5Q5	Yes, a Picture is a kind of DigitalPicture.
A5Q6	Yes, a Picture is a type of SimplePicture.
A5Q7	No, a SimplePicture is not a type of Picture.

A5: Modifying a Picture (cont'd)

- Read the next part of §A5 (pp11-12)
- Work on exercises 1-5 (pp12-13), which you'll finish for HW — due next class!
- *Optional:* If you finish the exercises with time left or want an extra challenge before next class, work on exercise 6. HINT: Water tends to reduce levels of red.

Finish exercises 1-5 (pp12-13) in §A5