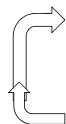


Announcements

- New approach to grading labs
 - You answer questions and give the URL for your Web page in a Catalyst WebQ quiz
 - Open all week
 - Return to it again and again
 - "Open book" like all labs
 - It's due on Monday at noon
 - No Collect It
 - No separate Word document

Announcements

- New approach starts with today's lab!

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1. Work on the lab for a while
 2. Go to Catalyst WebQ
 1. Enter your Web page's URL
 2. Answer some questions
 3. Repeat Steps 1 and 2 until done with the lab and the questions in WebQ.
 4. Upload your lab to your Web space with sftp.
 5. TA's check your Web page and assign more points.

Announcements

- Advantages
 - The questions in WebQ
 - Point you toward tricky parts of the lab.
 - Make sure you understand the materials.
 - Because Catalyst does most of the grading, TA's can grade the rest of your work faster.
 - 75% automatically done by Catalyst
 - 25% graded by TAs looking at your code

Announcements

- Weekly Quick Writes
 - Cover anything in lecture or reading
 - From the previous week or this week up to the day of the Quick Write
 - Can take place in any lecture
 - We drop your lowest two scores for the quarter

ALGORITHMS

Writing an algorithm

- Write the steps for drawing a rabbit
- What are the five essential properties of the algorithm?
 - Inputs
 - Outputs
 - Definiteness
 - Effectiveness
 - Finiteness

Drawing a Rabbit Algorithm

- Inputs
 - Pencil or pen
 - Paper
 - Photo or rabbit or real rabbit
- Outputs
 - Drawing of rabbit on paper

Drawing a Rabbit Algorithm

- Definiteness—series of steps and exceptions
 - Put the pencil in your hand
 - Check to see if it's sharp
 - Sharpen if needed
 - Place paper on table
 - Draw a rabbit-shape
 - Draw long ears
 - Draw rabbit eyes
 - Are all the body parts drawn?
- Are these directions enough to guarantee that it will look like a rabbit?

Drawing a Rabbit Algorithm

- Effectiveness—Doable
- Finiteness—When to stop?
 - How do we make that kind of judgment?
 - How do we know when the drawing is done?

Drawing a Rabbit Algorithm

- Inputs
- Outputs
- Definiteness
- Effectiveness
- Finiteness

Drawing a Rabbit Algorithm

- Inputs
- Outputs
- Definiteness
- Effectiveness
- Finiteness

Drawing a Rabbit Algorithm

- Inputs
- Outputs
- Definiteness
- Effectiveness
- Finiteness