Q1. Function vs Procedure

- What is the difference between a function and a procedure?
  - Procedure is something to do – turn, move, dance
  - Function is a calculated value – a number, an object, a direction
  - A function by itself is not very useful, a function has to be used in some way based on the type of value it calculates

Q2. Write a function called tallerHeight to compute the height of the tallest of two objects.

- What type of function should it be? Where do you create it?
  - Scene function

- What is the return type?

- Need two parameters, what are their types?
Q2. Write a function called tallerHeight to compute the height of the tallest of two objects

- What type of function should it be? Where do you create it?
  - Scene function
    - Like to be able to use it for any two objects
- What is the return type?
  - DecimalNumber
- Need two parameters, what are their types?
  - SJointedModel
    - Then works for any creatures

Can write your own functions

Function for Scene OR Function for character

Use scene function if it involves multiple objects

Create Scene function tallerHeight

- Inputs: two objects
- Output: the height (decimal number) of the taller object
Q3 What line of code do we have to put in every function?

- Return statement!
  - Must return the same type as the specified return value.

Q4 What is the code for tallerHeight?
Q4 What is the code for `tallerHeight`?

```plaintext
declare (DecimalNumber) function tallerHeight
with parameters: SJointedModel animal1, SJointedModel animal2
```

```plaintext
do in order
    if (animal1.getHeight) > (animal2.getHeight) then
        return (animal1.getHeight)
    else
        return (animal2.getHeight)
```

Q5 Given a bear and a flamingo, how does one use the function `tallerHeight`?

- Have panda say what the taller height is.

Q6. Write a function called `tallerObject` to return the object who is taller of two objects.

- What type of function should it be? Where do you create it?
  - Scene function

- What is the return type?
  - DecimalNumber

- Need two parameters, what are their types?
  - SJointedModel
Q6. Write a function called tallerObject to return the object who is taller of two objects.

- What type of function should it be? Where do you create it?
  - Scene function
    - Like to be able to use it for any two objects

- What is the return type?
  - SJointedModel

- Need two parameters, what are their types?
  - SJointedModel
    - Then works for any creatures

Q7 What is the code for tallerObject?

declare (SJointedModel) function tallerObject
with parameters (SJointedModel) creature1, (SJointedModel) creature2

if creature1.getHeight > creature2.getHeight
  return creature1
else
  return creature2
Q8 How do you get the taller of the bear and flamingo to say they are taller?

Announcements

• RQ and videos for Thursday
• Next assignment out this week

Class Today

• Jumping cat calculating how high and how far to jump, and other things…