

CompSci 94 Test 2 Reference Sheet

Given below are the condition possibilities for an if statement

The image shows the 'if' statement condition menu in Scratch. The main menu is titled 'if true is true then' and contains the following options:

- true (current value)
- el true
- false
- nextRandomBoolean
- NOT true
- NOT ???
- BOTH true AND ???
- EITHER true OR ???
- BOTH ??? AND ???
- EITHER ??? OR ???
- Relational (DecimalNumber) { ==, !=, <, <=, >=, > }
- Relational (WholeNumber) { ==, !=, <, <=, >=, > }
- Relational (SThing) { ==, != }
- Relational (MoveDirection) { ==, != }
- Relational (TurnDirection) { ==, != }
- Relational (RollDirection) { ==, != }
- Relational (Key) { ==, != }
- Relational (Color) { ==, != }
- Relational (Paint) { ==, != }
- TextString Comparison

Arrows point from the 'Relational' categories to their respective sub-menus:

- Relational (DecimalNumber) { ==, !=, <, <=, >=, > }** points to a menu with:
- ??? < ???
- ??? ≤ ???
- ??? > ???
- ??? ≥ ???
- ??? == ???
- ??? ≠ ???
- Relational (WholeNumber) { ==, !=, <, <=, >=, > }** points to a menu with:
- ??? == ???
- ??? ≠ ???
- Relational (SThing) { ==, != }** points to a menu with:
- ??? contentEquals ???
- ??? equalsIgnoreCase ???
- ??? startsWith ???
- ??? endsWith ???
- ??? contains ???

Below are the tiles at the bottom of a **procedure**

The image shows the tiles at the bottom of a procedure block in Scratch. The tiles are:


- do in order
- count _
- while _
- for each in _
- if _
- do together
- each in _ together
- variable...
- assign
- //comment

Below are the tiles at the bottom of a **function**

The image shows the tiles at the bottom of a function block in Scratch. The tiles are:

- do in order
- count _
- while _
- for each in _
- if _
- do together
- each in _ together
- variable...
- assign
- //comment
- return _

Given below are the panda procedures and panda Properties on the bottom right.

 **this.panda**

Procedures **Functions**

group by category ▼

Panda 's Editable Procedures (3)

edit

this.panda **standingPose**

edit

this.panda **sleepingPose**

edit

this.panda **crawlingPose**

Biped 's Editable Procedures (0)

say, think

this.panda **say** text: ???

this.panda **think** text: ???

position

this.panda **move** direction: ??? , amount: ???

this.panda **moveToward** target: ??? , amount: ???

this.panda **moveAwayFrom** target: ??? , amount: ???

this.panda **moveTo** target: ???

this.panda **place** spatialRelation: ??? , target: ???

orientation

this.panda **turn** direction: ??? , amount: ???

this.panda **roll** direction: ??? , amount: ???

this.panda **turnToFace** target: ???

this.panda **orientTo** target: ???

this.panda **orientToUpright**

this.panda **pointAt** target: ???

position & orientation

this.panda **moveAndOrientTo** target: ???

size

this.panda **setWidth** width: ???

this.panda **setHeight** height: ???

this.panda **setDepth** depth: ???

this.panda **resize** factor: ???

this.panda **resizeWidth** factor: ???

this.panda **resizeHeight** factor: ???

this.panda **resizeDepth** factor: ???

appearance

this.panda **setPaint** paint: ???

this.panda **setOpacity** opacity: ???

vehicle

this.panda **setVehicle** vehicle: ???

audio

this.panda **playAudio** audioSource: ???

timing

this.panda **delay** duration: ???

other

this.panda **straightenOutJoints**

 **this.panda** ▼

one shots ▼

this.panda's Properties

Panda **panda** ← new **Panda**

Paint = ☐ **WHITE**

Opacity = 1.0

Vehicle = **this**

Position = (x: -1.00 , y: 1.73 , z: -0.10)

Size =

Width: 0.75


Height: 1.15

Depth: 0.53

Show Joints: ☐

Reset

Given below are the panda functions.



this.panda

Procedures

Functions

group by category

Panda's Editable Functions (3)

edit

this.panda getLeftEar

edit

this.panda getRightEar

edit

this.panda creatureAbove friend1: ??? , friend2: ???

Biped's Editable Functions (0)

appearance

this.panda getPaint

this.panda getOpacity

size

this.panda getWidth

this.panda getHeight

this.panda getDepth

prompt user

this.panda getBooleanFromUser message: ???

this.panda getStringFromUser message: ???

this.panda getDoubleFromUser message: ???

this.panda getIntegerFromUser message: ???

other

this.panda getDistanceAbove other: ???

this.panda getDistanceBehind other: ???

this.panda getDistanceBelow other: ???

this.panda getDistanceInFrontOf other: ???

this.panda getDistanceTo other: ???

this.panda getDistanceToTheLeftOf other: ???

this.panda getDistanceToTheRightOf other: ???

this.panda getVantagePoint entity: ???

this.panda getVehicle

this.panda isAbove other: ???

this.panda isBehind other: ???

this.panda isBelow other: ???

this.panda isCollidingWith other: ???

this.panda isFacing other: ???

this.panda isInFrontOf other: ???

this.panda isToTheLeftOf other: ???

this.panda isToTheRightOf other: ???

this.panda toString

joints

this.panda getHead

this.panda getLeftAnkle

this.panda getLeftClavicle

this.panda getLeftElbow

this.panda getLeftEye

this.panda getLeftEyelid

this.panda getLeftFoot

this.panda getLeftHand

this.panda getLeftHip

this.panda getLeftIndexFinger

this.panda getLeftIndexFingerKnuckle

this.panda getLeftKnee

this.panda getLeftMiddleFinger

this.panda getLeftMiddleFingerKnuckle

this.panda getLeftPinkyFinger

this.panda getLeftPinkyFingerKnuckle

this.panda getLeftShoulder

this.panda getLeftThumb

this.panda getLeftThumbKnuckle

this.panda getLeftWrist

this.panda getMouth

this.panda getNeck

this.panda getPelvis

this.panda getRightAnkle

this.panda getRightClavicle

this.panda getRightElbow

this.panda getRightEye

this.panda getRightEyelid

this.panda getRightFoot

this.panda getRightHand

this.panda getRightHip

this.panda getRightIndexFinger

this.panda getRightIndexFingerKnuckle

this.panda getRightKnee

this.panda getRightMiddleFinger

this.panda getRightMiddleFingerKnuckle

this.panda getRightPinkyFinger

this.panda getRightPinkyFingerKnuckle

this.panda getRightShoulder

this.panda getRightThumb

this.panda getRightThumbKnuckle

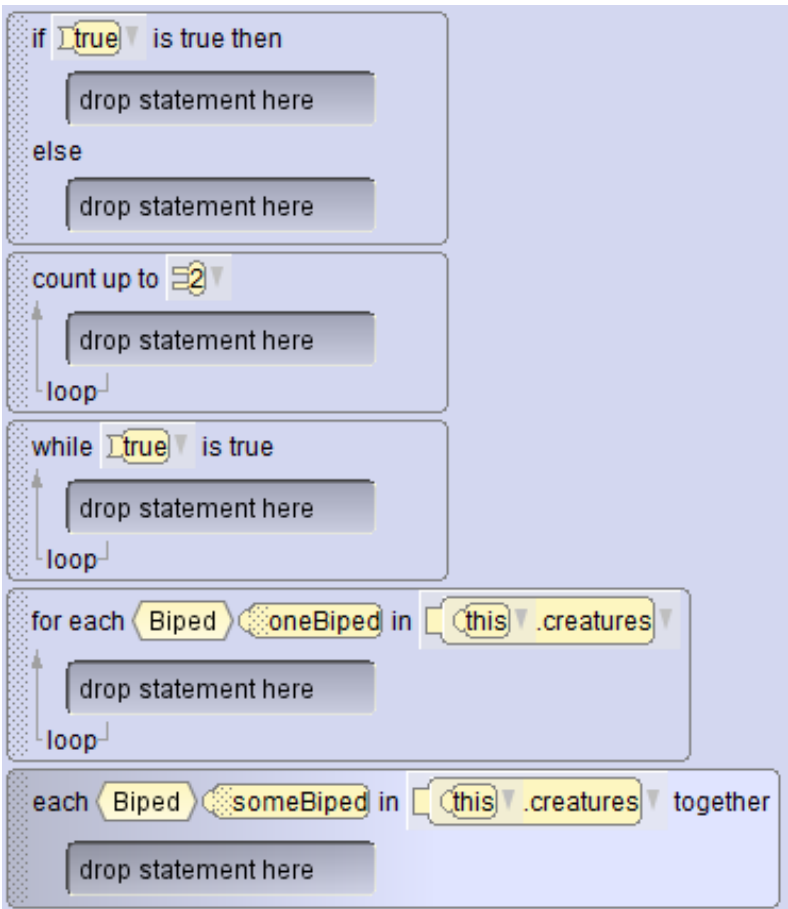
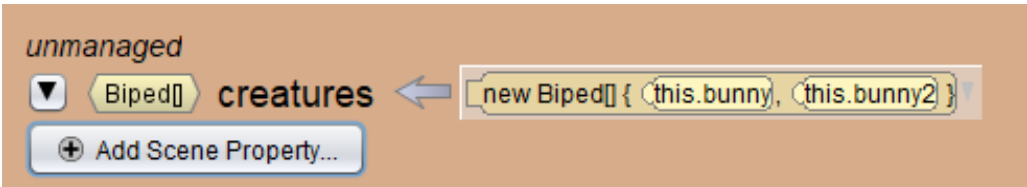
this.panda getRightWrist

this.panda getSpineBase

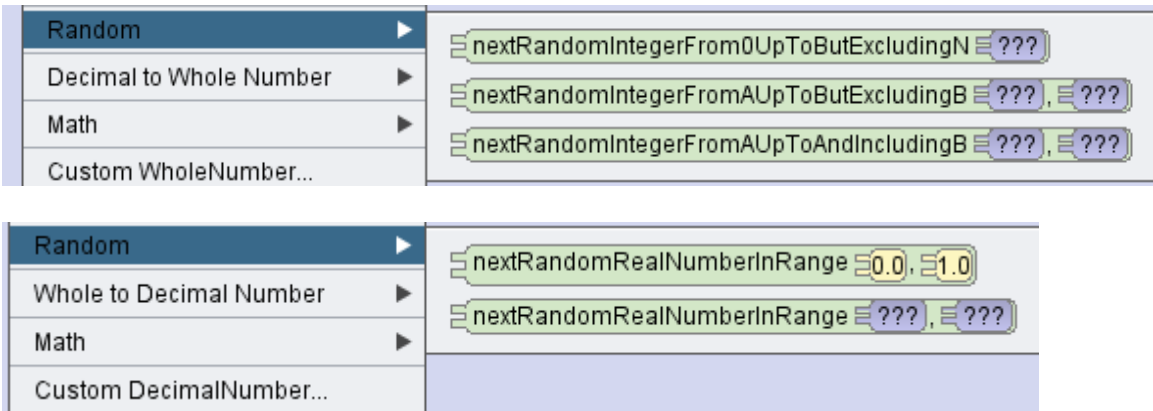
this.panda getSpineMiddle

this.panda getSpineUpper

If, loops, and changing an array element.



Random Integer and Decimal Numbers



Events



The image displays a series of Scratch code blocks for handling various events. Each block is a light blue rectangle with a yellow 'this' icon in the top-left corner. The blocks are arranged vertically, with some having a 'declare procedure' section and others having a 'do in order' section. The blocks are as follows:

- addSceneActivationListener**: A block with a 'declare procedure' section for **sceneActivated**. The 'do in order' section contains a 'this myFirstMethod' block.
- addTimeListener**: A block with a 'declare procedure' section for **timeElapsed**. The 'do in order' section contains a 'drop statement here' block. The block has a '1.0' value field and an 'add detail' button.
- addKeyPressListener**: A block with a 'declare procedure' section for **keyPressed**. The 'do in order' section contains an 'if' block with a condition 'event isKey S is true then' and two 'drop statement here' blocks. The block has an 'add detail' button.
- addMouseClickedOnObjectListener**: A block with a 'declare procedure' section for **mouseClicked**. The 'do in order' section contains an 'if' block with a condition 'event getModelAtMouseLocation == this.panda is true then' and two 'drop statement here' blocks. The block has a 'new Visual[] { this.bunny, this.panda, this.panda2, this.panda3 }' field and an 'add detail' button.
- addCollisionStartListener**: A block with a 'declare procedure' section for **collisionStarted**. The 'do in order' section contains a 'drop statement here' block. The block has a 'new SThing[] { this.bunny }' field and an 'add detail' button.
- addDefaultModelManipulation**: A block with no 'do in order' section.