

App Inventor

This week we are going to make a CountDown app.





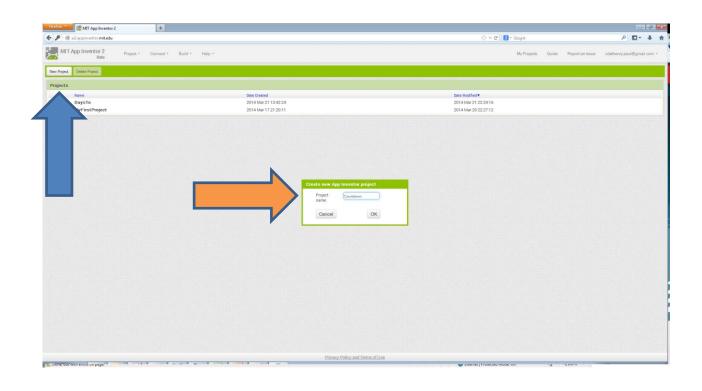
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What we plan to do is similar to: http://www.yourchristmascountdown.com/



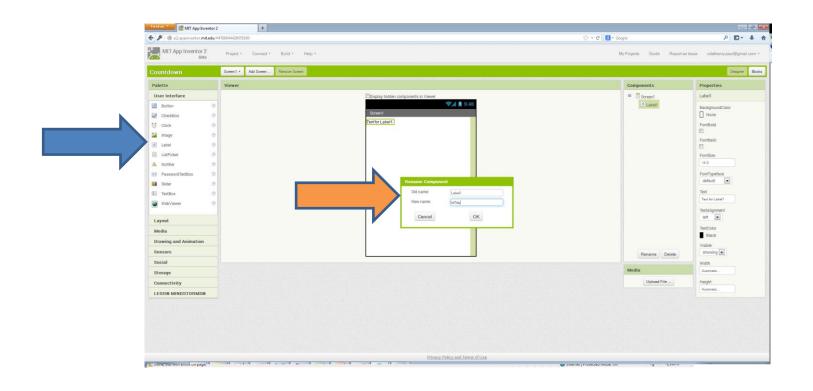


Click on the New Project button. The project name is Countdown.



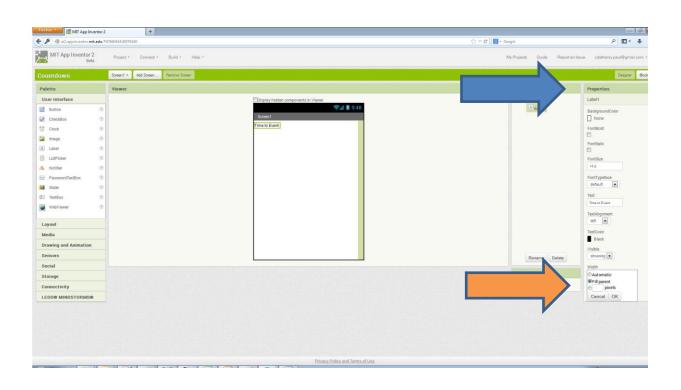


Drag and drop a Label control from the Palette. Rename the control to IblTitle.



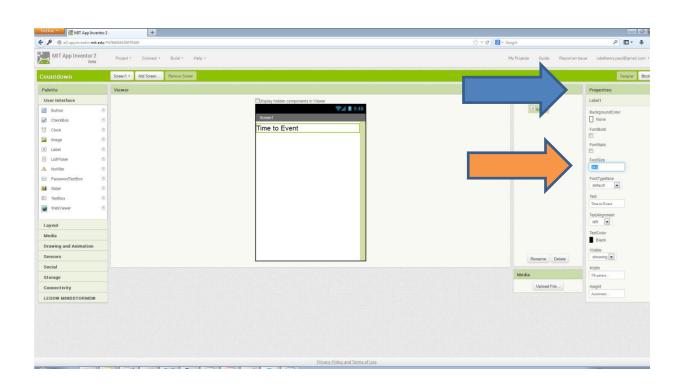


Select the Properties column. Change the Width to Fill parent.



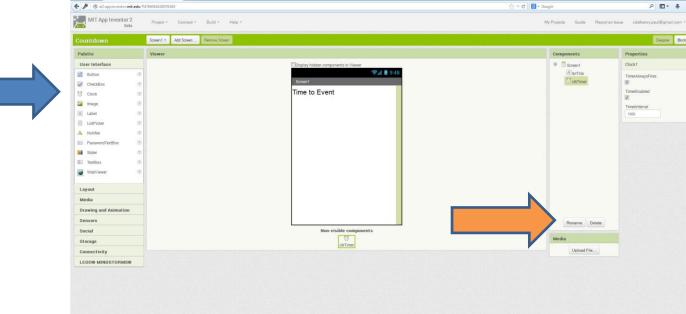


Select the Properties column. Change the FontSize.





Drag and drop a Clock control from the Palette. Rename the control to clkTimer.

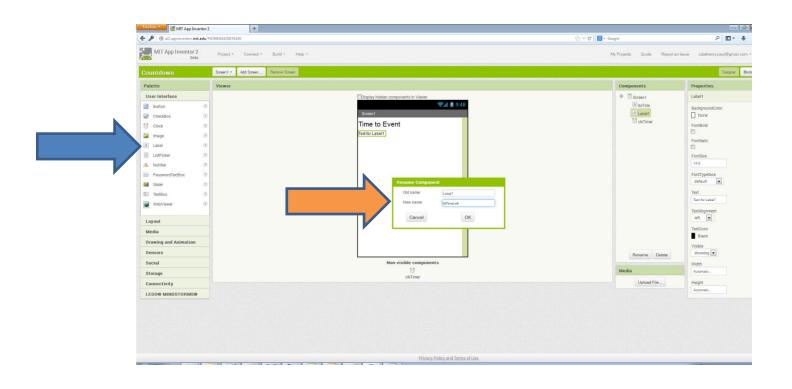




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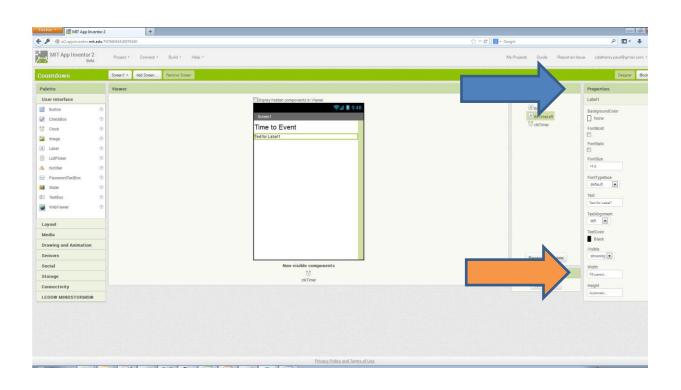


Drag and drop a Label control from the Palette. Rename control to IblTimeLeft





Select the Properties column. Change the Width to Fill parent.





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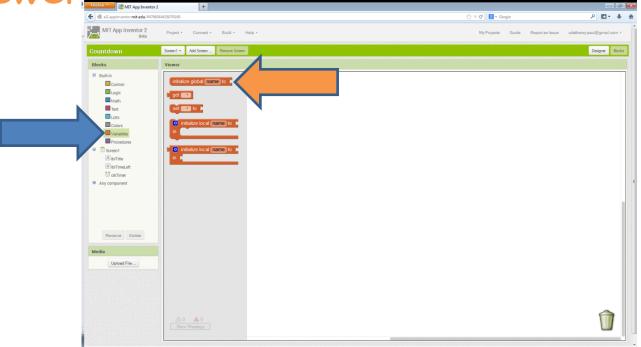
Next steps:

- 1. Create a Global variable to store the number of milliseconds until Dec. 25th
- 2. When the app starts calculate the number of milliseconds until Dec. 25th
- 3. Store this value in a Global variable
- 4. Every time the timer event triggers calculate the number of milliseconds for the current time
- 5. Calculate the difference in milliseconds between the current time and the time until Dec. 25
- 6. Store this in a Local variable



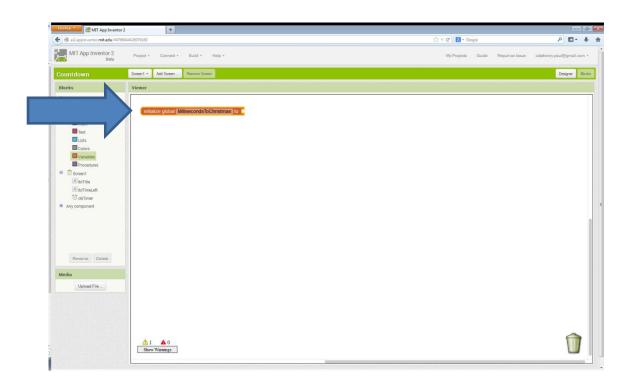
Select Variables block drag and drop "initialize global <name> to" to the script

Viewer_



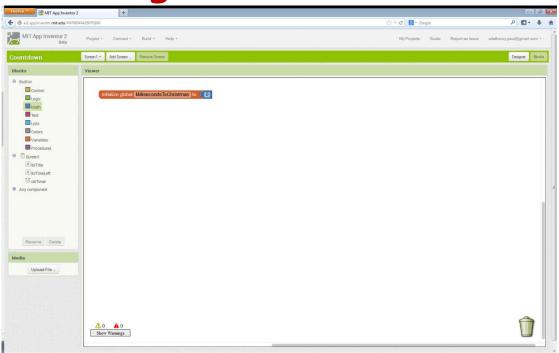


Change the variable name to Milliseconds To Christmas.



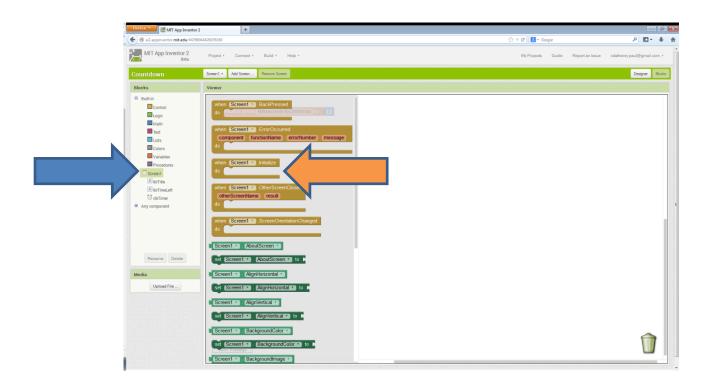


Select Math from Built-in Blocks. Select the O value block. Drop it to the end of the "initialize global...to" Block.



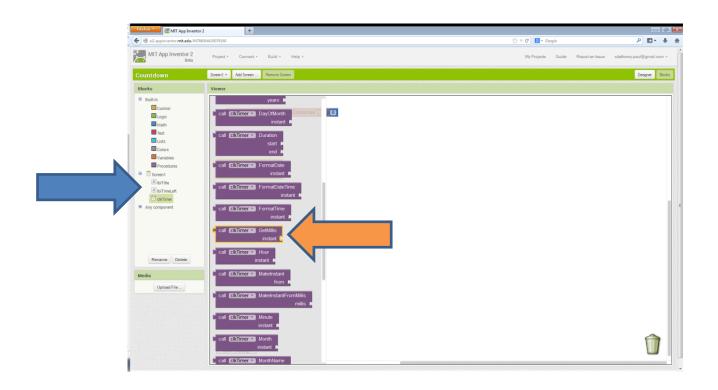


Select the Screen block, select the "when Screen1.Initialize script.



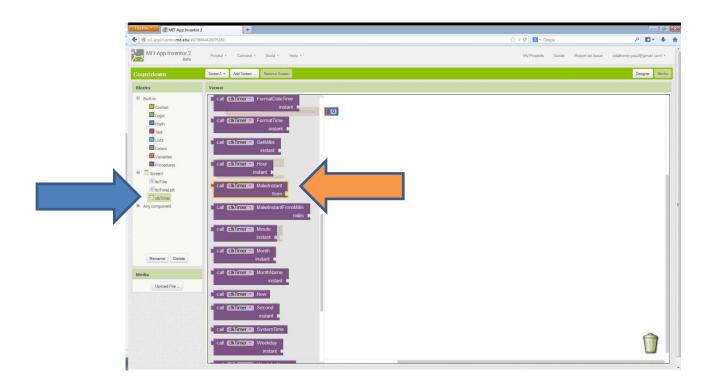


Select the clkTimer block, select the call clkTimer.GetMillis script.





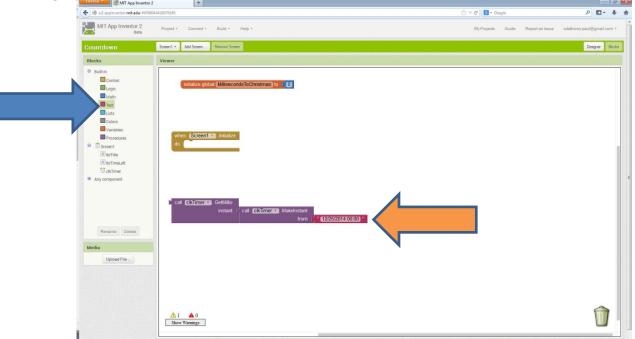
Select the clkTimer block, select the call clkTimer. MakeInstant script.





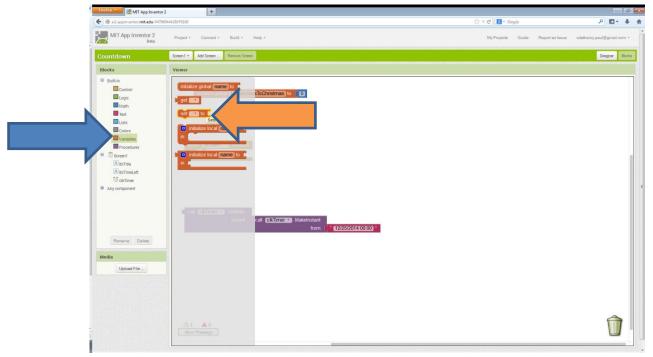
Select the Text block, select the blank Text type 12/25/2014 00:00 into the

Block.



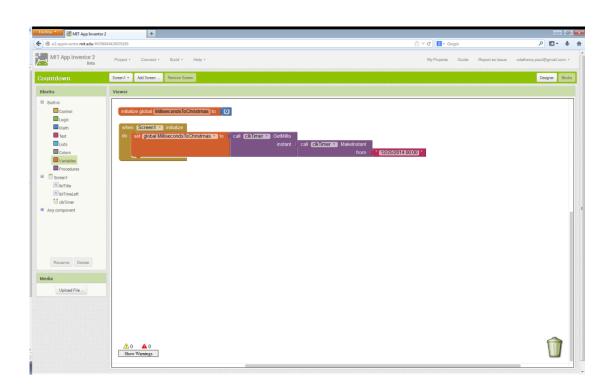


Select the Variables block, select the set..to Block. Change the dropdown to global Milliseconds To Christmas.





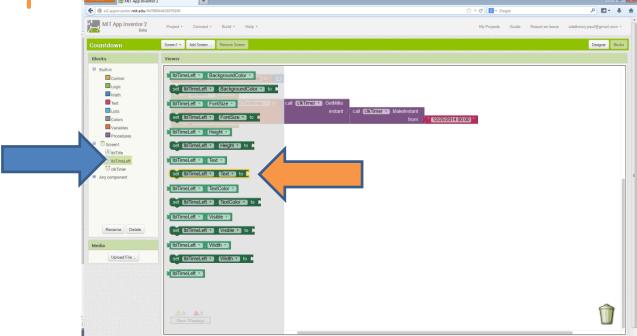
Plug the script blocks together and place within the "when Screen1. Initialize".





To test the script, select the lblTimerLeft block, select the "set lblTimer.Text to"

script





Select the Variables Built-in block. Select the "get..." script. Change the dropdown to global Milliseconds To Christmas.

| Countdown | Count | Asi Some | Record Society | Count | Count | Countdown |

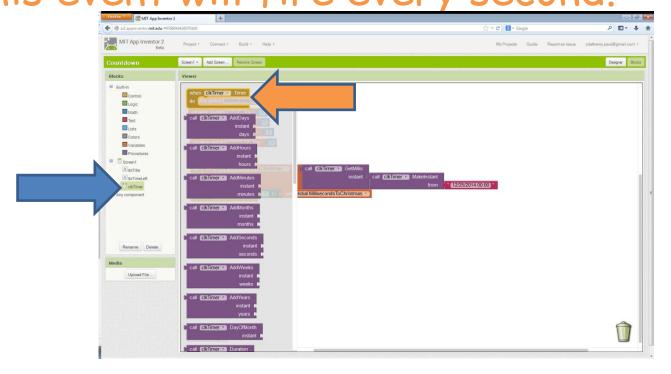


Add additional global Variables, DaysLeft, HoursLeft, MinutesLeft, SecondsLeft, MillisecondsForNow.

```
| Count | Add Jones | Pages | Corona | Bull | Hole | Bergar | Bergar
```



Select the clkTimer block. Select the "when clkTimer. Timer" script. By default this event will fire every second.





In the "when clkTimer. Timer" script calculate the milliseconds for the current

time.

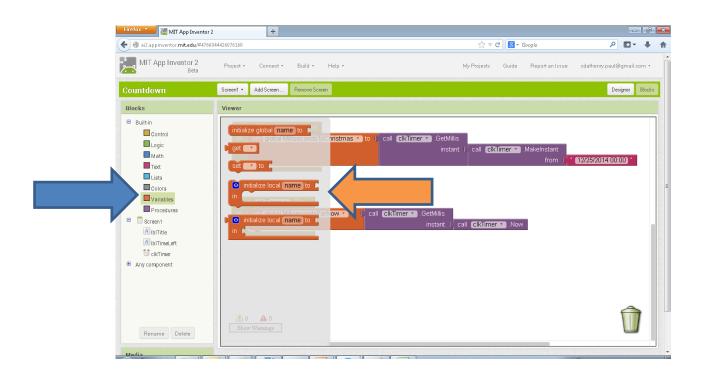
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     Procedures
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     A lblTimeLeft
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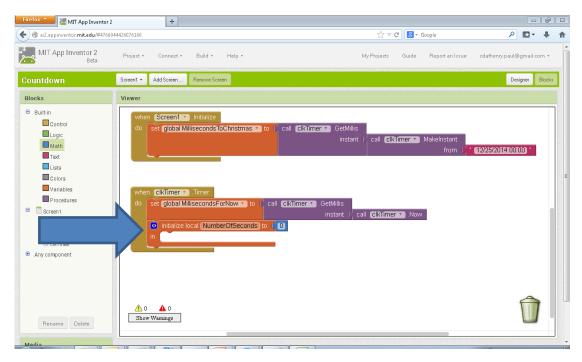


Select the Variables block. Select the "initialize local ...to" script.



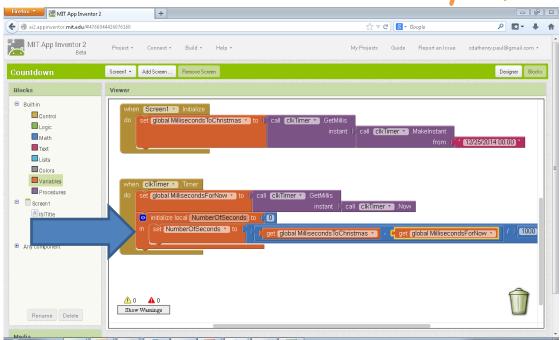


Change the variable name to NumberOfSeconds. Select the value to zero.





Set the variable NumberOfSeconds to MilliSecondsToChristmas less MilliSecondsForNow divide by 1,000.





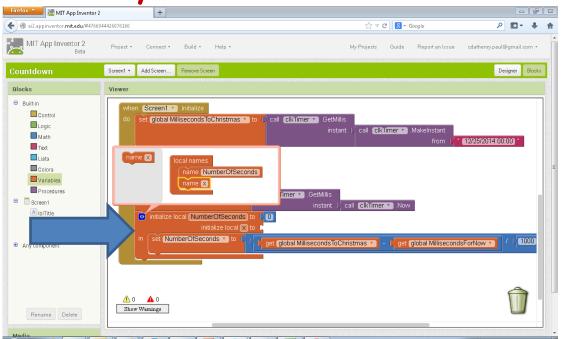
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Next steps:

- 1. Number of seconds in a minute is 60
- 2. Number of seconds in a hour is 3,600
- 3. Number of seconds in a day is 864,000
- 4. Use this information to calculate the time left to Christmas

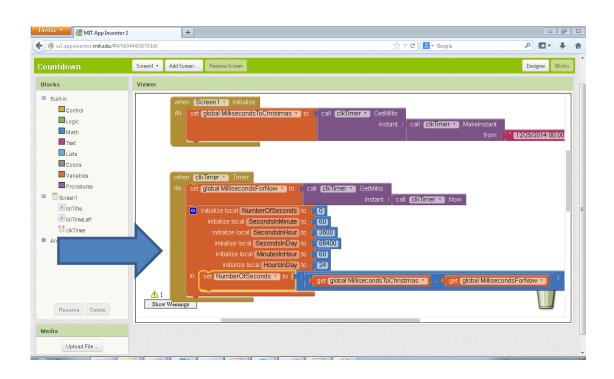


Create more local variables
SecondsInMinute, SecondsInHour,
SecondsInDay set them to values.



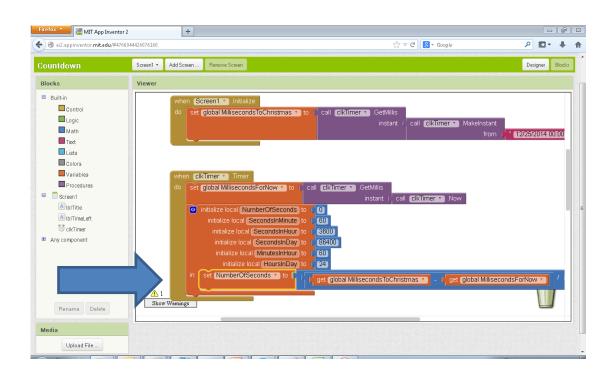


The local variables would look like.





To calculate the number of seconds left to Christmas use the divide math block.





To calculate the number of seconds left to Christmas use the modulo math block.

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                                   initialize local (SecondsInMinute) to ( 60
      Control
                                    initialize local (SecondsInHour) to (3600)
                                     initialize local SecondsInDay to 86400
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The modulo math block will get the remainder of modulo.

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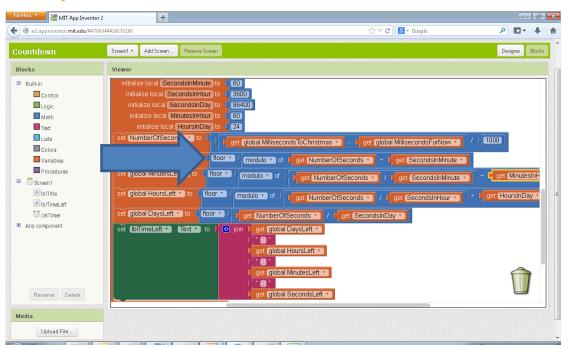
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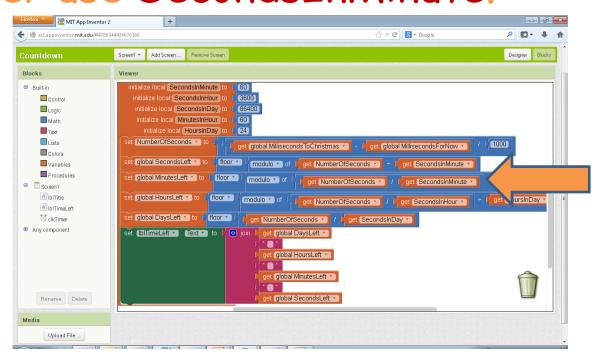


Then use the floor math block to get the closest full number that is less than the number of seconds.





To calculate the number of minutes left to Christmas use the divide math block, however use SecondsInMinute.





To calculate the number of hours left to Christmas use the divide math block, however use SecondsInHour.

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To calculate the number of days left to Christmas divide NumberOfSeconds by SecondsInDay.

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Select Text select "Join" script.

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