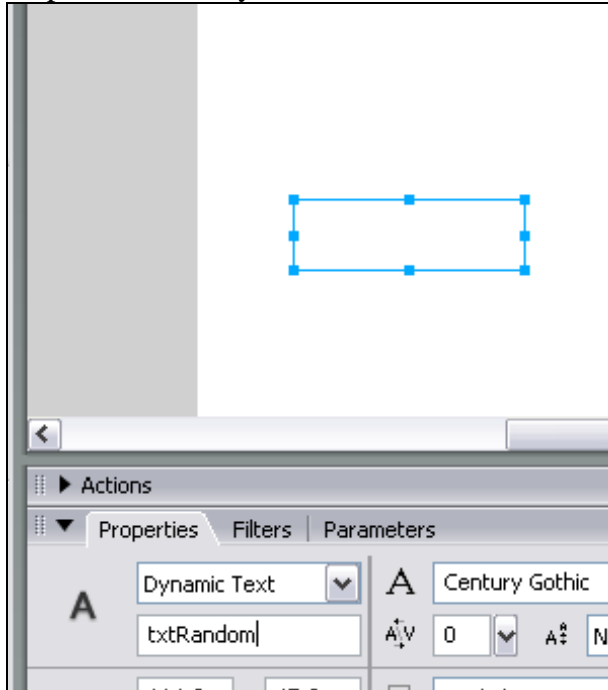


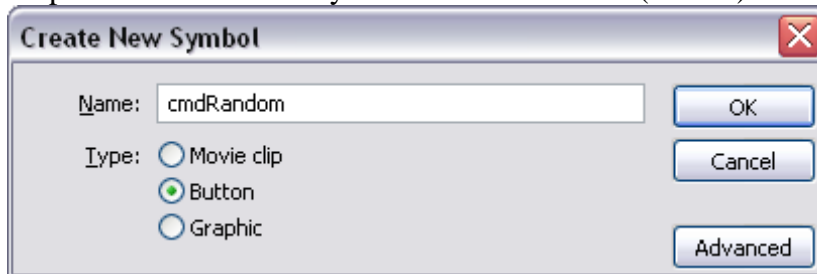
# Random Number Generator

Step 1 – Start a new Flash Movie

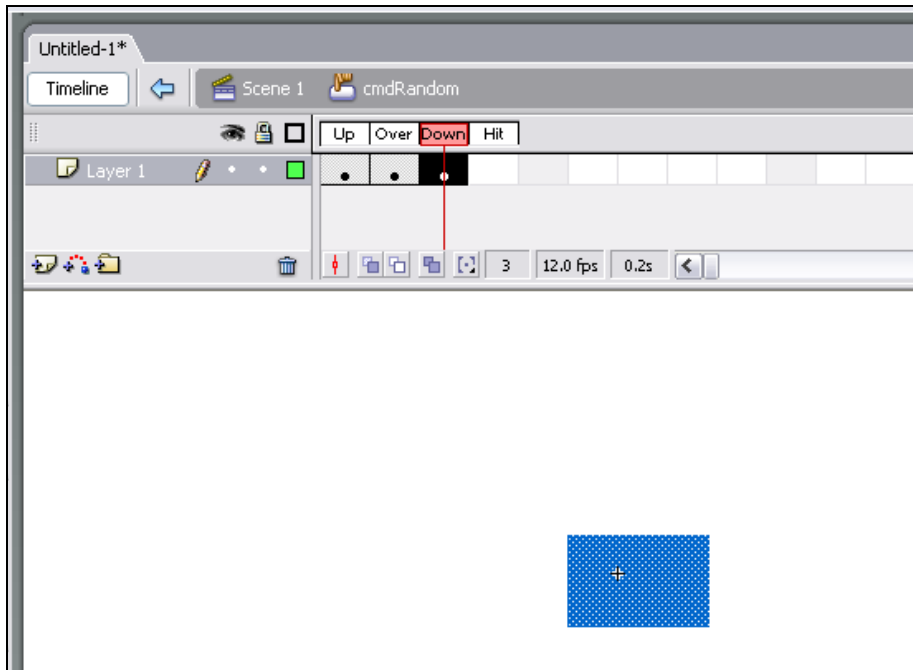
Step 2 – Draw a dynamic text box... instance name **txtRandom**



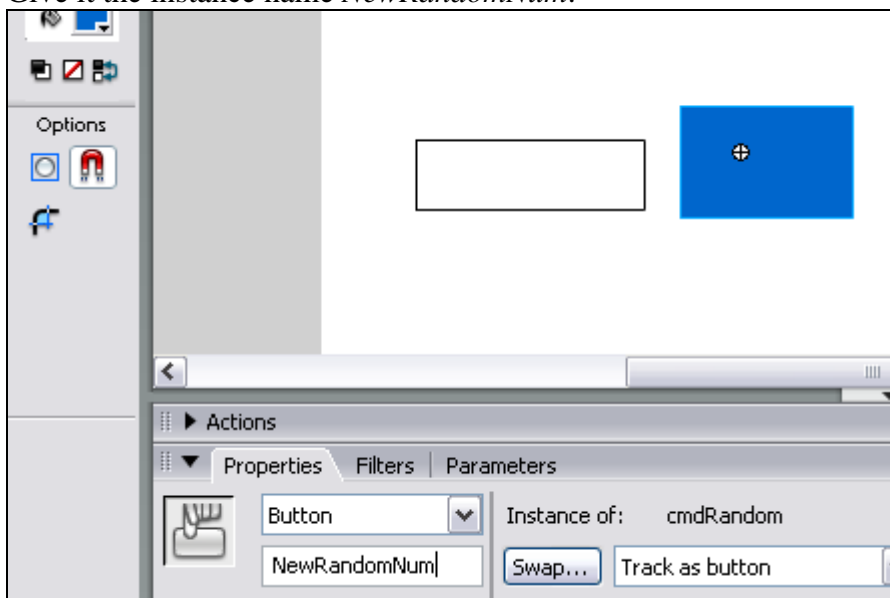
Step 3 – Insert → New Symbol... **cmdRandom** (Button)... click OK



Step 4 – Create yourself a button... (next page!).... Once you are done click back into **Scene 1**

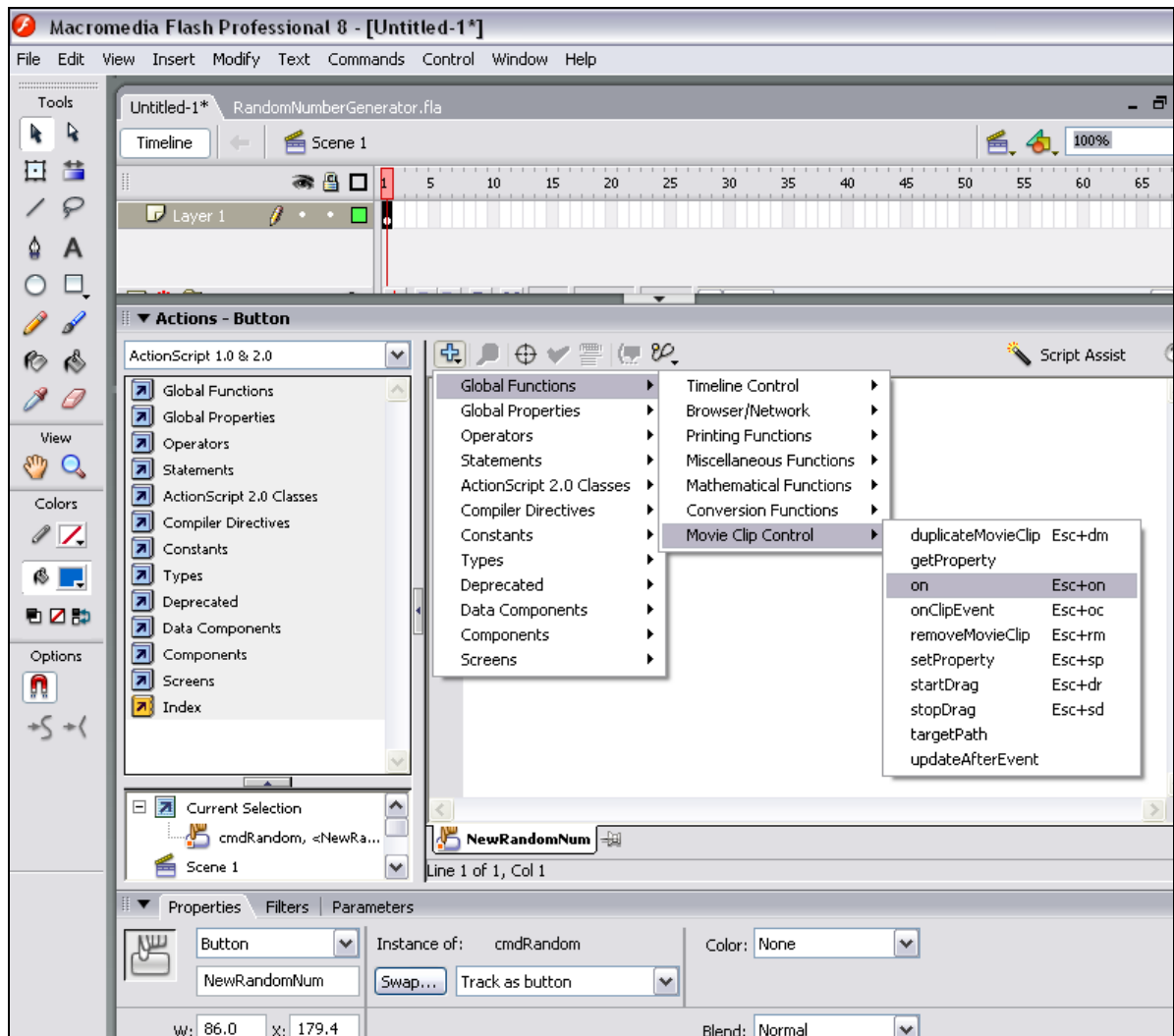


Step 5 – Once back in Scene 1... drop the button onto your canvas next to your text box. Give it the instance name *NewRandomNum*:



Step 6 – Make Sure the *NewRandomNum* is selected and click **Actions**

Step 7 – Add the “on Release” code by clicking the plus button (as shown on the next page!.... make sure you double-click *release* as well!)



Step 8 – Type in the code below!

```

1 on (release) {
2     var random_number
3     random_number = Math.floor(Math.random() * 10)
4     txtRandom.text = random_number
5 }
6

```

Step 9 – **Save and test...** what do you think? Click the button for a while... what is happening? Now do the questions on the next page!

## Questions:

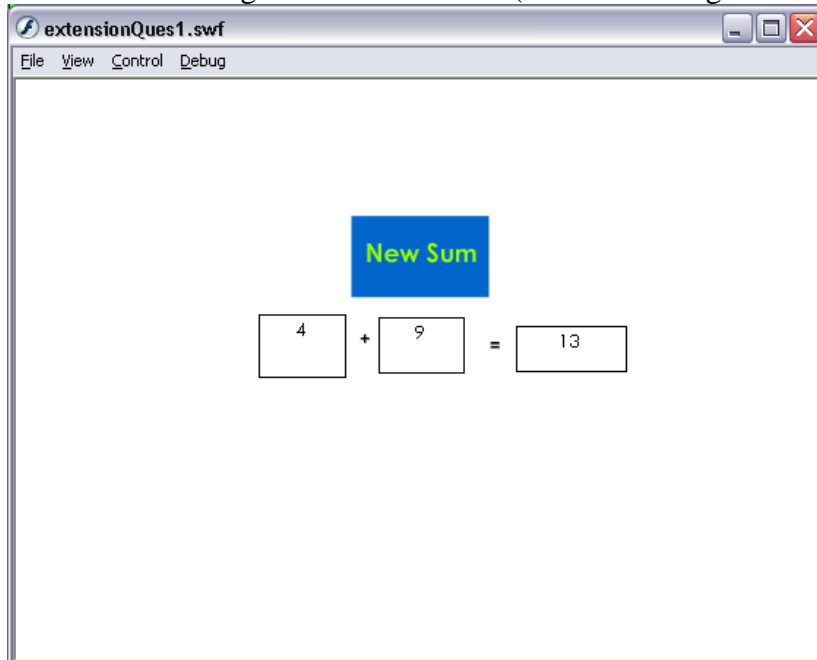
1. Take away the **Math.floor()** so that the code reads:

```
1 on (release) {
2     var random_number
3     random_number = Math.random()*10
4     txtRandom.text = random_number
5 }
```

- What happens? Knowing this, explain what the **Math.floor()** does!
2. At the moment, this code only generates a random number between 1 and 10.... How could I generate a random number between 1 and 100?
  3. What about a random number between 1 and 1000?
  4. Does the **Math.random()** work if I use a lowercase 'm' – ie. **math.random()** ??? .... Try it!
  5. Do you think random numbers would be good to use when you are making games? Can you think of some examples when you would use them in a game?

## Extension:

1. See if you can create a piece of software where I can click a button that displays a sum on the screen and gives me the answer (like in this diagram below)...



2. Where could I sell a piece of software like this? Would any age group be interested? Who?