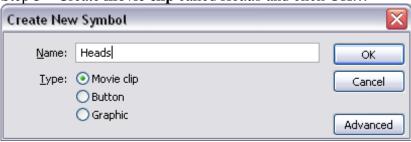
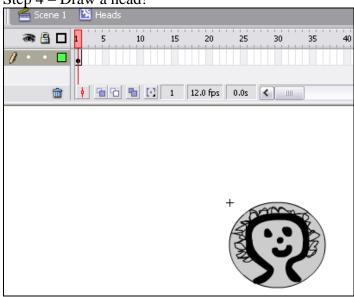
## Coin Toss

- Step 1 Start a new flash movie...
- Step 2 Insert  $\rightarrow$  New Symbol...

Step 3 – Create **movie clip** called *Heads* and click OK...



Step 4 – Draw a head!

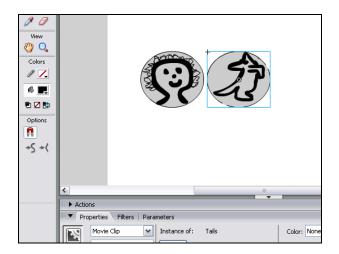


Step 5 – Click back into Scene 1



Step 6 – Repeat Steps **two, three, four** and **five** but do it for **Tails** instead!

Step 7 – Drag and drop both movie clips out onto the stage (as shown on the next page!)

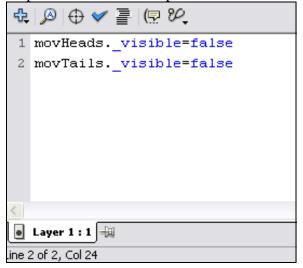


Step 8 – Give an instance name to the heads movie clip.... I have used **movHeads** (also do the same for the tails movie clip... I have used **movTails**)

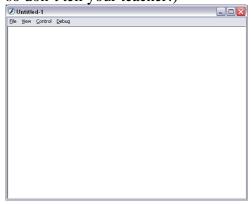


Step 9 – Click off the stage so that neither the heads nor tails movie clips are selected!

Step 10 – Click **Actions** panel... and add the following code:



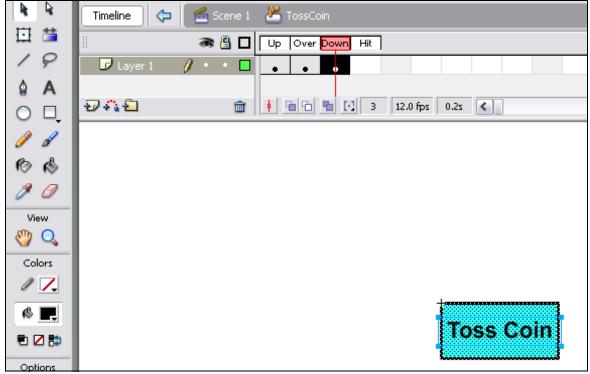
Step 11 – Save and test movie... what do you think so far? ;-) (I know nothing happens so don't tell your teacher!)



Step 12 – Insert → New Symbol... create a button and call it **TossCoin**... click OK

Create New Symbol		
<u>N</u> ame:	TossCoin	ОК
<u>I</u> ype:	○ Movie clip ⑤ Button	Cancel
	○ Graphic	Advanced

Step 13 – Create a button:



Step 14 – Click back into Scene 1...

Step 15 - ...and drag and drop the button onto your stage:



Step 16 – Make sure the button is selected and give it the instance name **btnToss** 



Step 17 – With the btnToss button still selected, bring up the Actions panel and add the following code!

(which is on the next page – I underestimated the size of the screen grab!) ☺

. . . .

```
₾ 🔎 🗢 🗸 🗐 🕾 🎾
                                                   Script Assist
  1 on (release) {
  2
        var random number
        random number = Math.floor(Math.random()*2);
  3
  4 //if the random number is 0, show a picture of a head:
             if(random number==0)
                 movHeads._visible=true
                 movTails._visible=false
 10 //if the random number is 1, show a picture of a tail:
             if (random_number==1)
 12
                 movHeads. visible=false
 13
 14
                 movTails._visible=true
 15
 16 }
 17
📇 btnToss 坦
Line 17 of 17, Col 1
```

Step 18 – Save and test... click toss coin a few times!



## **Questions:**

- 1. When you previewed your movie in step 11, why did neither the heads or tails coin appear? Which line of action script code made this happen?
- 2. this project uses the "if" statement, which we use for making decisions in programs... can you think of a game you play which might use an "if" statement? (for example if the ball goes in the hoop then score 2 points... you think of another!)
- 3. Why do you think "if" statements are valuable to programming?
- 4. What do you think the following line of code is used for? Why would this be valuable in programming?

//if the random number is 1, show a picture of a tail:

5. Without knowing where I got this code from, can you tell me what it does?

## **Extension:**

1. Can you rewrite this program so it shows 2 cards, which could either be a Jack, Queen, King or Ace?