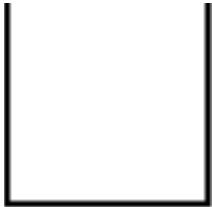
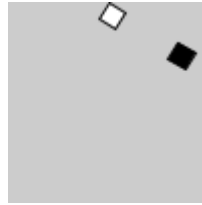


# Processing, Transformations and the Matrix Stack

## Program 1

```
Line 1.    size(100,100);  
Line 2.    translate(50,0);  
Line 3.    rotate(radians(30));  
Line 4.    rect(0,0,10,10);  
Line 5.    fill(0);  
Line 6.    translate(40,0);  
Line 7.    rect(0,0,10,10);
```



Line 1



Line 2



Lines 3-5



Lines 6-7

## Program 2

```
Line 1.    size(100,100);  
Line 2.    translate(50,0);  
Line 3.    rotate(radians(30));  
Line 4.    rect(0,0,10,10);  
Line 5.    resetMatrix();  
Line 6.    fill(0);  
Line 7.    translate(40,0);  
Line 8.    rect(0,0,10,10);
```



Line 1



Line 2



Lines 3-4



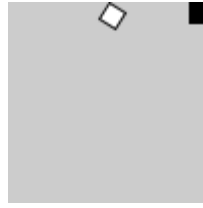
Lines 5-6



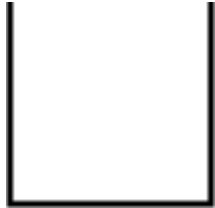
Lines 7-8

Program 3

```
Line 1. size(100,100);  
Line 2. translate(50,0);  
Line 3. pushMatrix();  
Line 4. rotate(radians(30));  
Line 5. rect(0,0,10,10);  
Line 6. popMatrix();  
Line 7. fill(0);  
Line 8. translate(40,0);  
Line 9. rect(0,0,10,10);
```



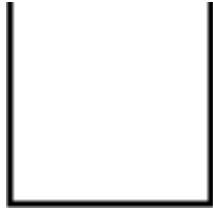
Line 1



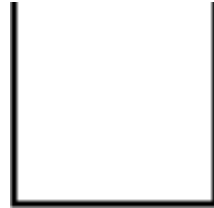
Line 2



Line 3



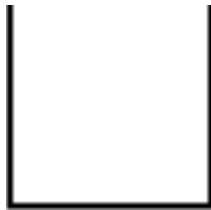
Lines 4-5



Lines 6-7



Lines 8-9



Lines 3-5 (saved)