

Rotating_Earth

//Rotating Image of Earth

//Mr. H.

```
float angle = 0;
```

```
PImage Earth;
```

```
void setup() {
```

```
size(600, 600);
```

```
noStroke();
```

```
Earth = loadImage("earth_top_view.jpg");
```

```
Earth.resize(250,250);
```

```
}
```

```
void draw() {
```

```
background(5);
```

```
textSize(24);
```

```
textAlign(CENTER);
```

```
fill(255);
```

```
text("Rotating An Image",width/2,50);
```

```
//isolate the code between them
```

```
pushMatrix();
```

```
//must translate to rotate around center of window
```

```
translate(width/2, height/2);
```

```
//rotation of angle in radians
```

```
rotate(radians(angle));
```

```
//centers image of Earth at (0,0)
```

```
image(Earth,-125,-125);
```

```
popMatrix();
```

```
//angle must decrement for sun to rise in the east
```

```
angle = angle - 0.25;
```

```
fill(255);
```

```
text("Angle = "+int(angle)+"°",width/2,550);
```

```
//states coterminal angle between 0° and 360°
```

```
if (angle <= 0){
```

```
    angle = angle + 360;
```

```
}
```

```
}
```