Earth_and_Moon_Example

```processing
//Earth and Moon Image Example
//images obtained from http://clipart-library.com/
//are allowed for "personal use"
//Mr. H.

PImage Earth, Moon, Space;
int r = 300;
int degree = 0;
float x;
float y;

void setup() {
 size(800, 600);

 Earth = loadImage("Earth-Free-Download.png");
 Earth.resize(240,240);
 Moon = loadImage("Moon-Free-Download.png");
 Moon.resize(80,80);
 Space = loadImage("Space-Free-Download.png");
 Space.resize(800,600);
}

void draw() {
 image(Space,0,0);
 image(Earth,250,200);

 //use sin() & cos() to create "circular" motion effect
 x = 300+cos(radians(degree-90))*r;
 y = 300-sin(radians(degree-90))*r*0.2;
 image(Moon,x+50,y);

 degree = degree + 1;
 if (degree >= 360)
 {
   degree = degree -360;
 }

 //place Earth on top of Moon when it appears further away
 if(degree >= 90 && degree <= 270){
  image(Earth,250,200);
 }
 delay(20);
}
```