

## Sweeping\_Arm\_Example

//Sweeping Arm Example

//Mr. H.

```
int degrees = 0, r = 200, bounce = 1;
```

```
void setup(){  
  size(600,600);  
}
```

```
void draw(){  
  background(255);
```

```
  //places angle in top left corner
```

```
  fill(0);
```

```
  textSize(16);
```

```
  text("Angle = "+degrees+"°",10,20);
```

```
  //creates a blue rotating arm from the center point (300,300)
```

```
  stroke(0,0,255);
```

```
  //subtracting 90 from the degree starts arm in vertical position
```

```
  line(300,300,300+r*cos(radians(degrees-90)),300+r*sin(radians(degrees-90)));
```

```
  //incrementing degrees causes the arm to sweep clockwise
```

```
  degrees = degrees + bounce;
```

```
  //sweeps the arm through angles of -60° to 60°
```

```
  if (degrees >= 60 || degrees <= -60){
```

```
    bounce = bounce*-1;
```

```
  }
```

```
}
```