

## Geometry\_Calculator

//Entering two integers to use for a calculation

//Rectangle Example of Area and Perimeter

//Mr. H.

int variable;

int stage = 0;

int rectangleLength = 0;

int rectangleWidth = 0;

int area = 0;

int perimeter = 0;

void setup()

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

```
void draw() {  
  background(255);  
  fill(0);
```

```
  textSize(30);  
  textAlign(CENTER);  
  text("Rectangle Calculator", 300, 40);
```

```
  textSize(20);  
  textAlign(LEFT);  
  text("Enter a dimension and press return", 20, 70);  
  text(variable, 20, 90);
```

```
  if (stage == 0)  
  {  
    text("length ?", 20, 110);  
  }
```

```
  if (stage == 1)  
  {  
    text("width ?", 20, 110);  
  
    text("length is ", 20, 150);  
    text(rectangleLength, 110, 150);  
  }
```

```
  if (stage == 2)  
  {  
    text("Press enter to calculate area and perimeter", 10, 240);
```

```

text("length is ", 20, 150);
text(rectangleLength, 110, 150);

text("width is ", 20, 180);
text(rectangleWidth, 110, 180);
}

if (stage == 3)
{
text("length is ", 20, 150);
text(rectangleLength, 110, 150);

text("width is ", 20, 180);
text(rectangleWidth, 110, 180);

text("The values for area and perimeter are:", 20, 240);

area = rectangleLength * rectangleWidth;
text("The area is", 20, 280);
text(area, 135, 280);

perimeter = (rectangleLength + rectangleWidth) * 2;
text("The perimeter is", 20, 310);
text(perimeter, 185, 310);
}
}

void keyPressed()
{
if ( key >= '0' && key <= '9' )
{
variable = variable * 10;
variable = variable + (key - 48);
}

if ( key == BACKSPACE || key == DELETE )
{
variable/=10;
}

if ( key == ENTER || key == RETURN )
{
stage = stage + 1;

if (stage == 1)
{

```

```
    rectangleLength = variable;  
    variable = 0;  
}  
  
if (stage == 2)  
{  
    rectangleWidth = variable;  
    variable = 0;  
}  
  
}  
}
```