```
public class Rotate {

   public static void main(String[] args) {

      Picture picture = new Picture(args[0]);

      int width = picture.width();

      // StdOut.println("width = " + width);

      int height = picture.height();

      // StdOut.println("height = " + height);

      // when flipping 90 deg, it is important to reset the frame because

      // height becomes width, and width becomes height.

      Picture newpic = new Picture(height, width);

      for (int col = 0; col < width; col++) {

         for (int row = 0; row < height; row++) {

            newpic.set(height - row - 1, col, picture.get(col, row));

         }

      }

      newpic.show();

      newpic.save("newpic.jpg");

   }

}
```

```
/**************************************************************************
 ***   What is the image classification problem?                        ***
 **************************************************************************/
```

The problem is to use a machine learning technique to classify a population into different categories.

```
/**************************************************************************
 ***   What is the machine learning process described in the documentation? ***
 **************************************************************************/
```

The machine learning process has two parts. The first part is to train the machine learning model with a large number of training samples. The second part is to test the trained model and predict new testing samples.

```
/**************************************************************************
 ***   What are the inputs to ImageClassifier.java?                     ***
 **************************************************************************/
```

The inputs are the training and testing files containing information of training and testing samples.

```
/**************************************************************************
 ***   What methods must you write?                                     ***
 **************************************************************************/
```

I must write a method called extraFeatures(Picture picture) which take picture as inp
ut and return double[] as output.

```
/**************************************************************************
 ***   Do you attest that this work is your own, in accordance with the     ***
 ***   statement on academic integrity in the syllabus?                 ***
 **************************************************************************/
```

Yes or no?

Yes.

```
/**************************************************************************
```

```
***   List any other comments here.                                          ***
*******************************************************************************/
```