```
package ca.camosun.romanji;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.Spinner;
import android.widget.TextView;
//This app is a basic language translator that goes through 1 to 10 both from English and
Romanii
//and back again.
public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemSelectedListener{
//This the button declaration and the translation field
    Button translateButton;
    TextView wordField;
    private static String nA = "Please enter a number!";
// Creates an adapter for spinner functionality to choose between English and Romanji.
    @Override
    protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
         setContentView(R.layout.activity main);
         Spinner languageSelector = (Spinner) findViewById(R.id.spinner);
         ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource(this,
                  R.array.language, android.R.layout.simple spinner item);
         adapter.setDropDownViewResource(android.R.layout.simple spinner dropdown item);
         languageSelector.setAdapter(adapter);
         languageSelector.setOnItemSelectedListener(this);
         translateButton = findViewById(R.id.button);
         wordField = findViewById(R.id.editText);
// This is for the functionality when a button has been clicked
    public void onItemSelected(AdapterView<?> parent, View view,
                                   int pos, long id) {
         parent.getItemAtPosition(pos);
         if(pos == 0) {
             translateButton.setText("Romanji");
             translateButton.setOnClickListener(new View.OnClickListener() {
                  @Override
                  public void onClick(View v) {
                      String word = wordField.getText().toString();
                      String returnValue = engToRomanji(word);
                      wordField.setText(returnValue);
             });
         } else {
             translateButton.setText("English");
             translateButton.setOnClickListener(new View.OnClickListener() {
                  @Override
                  public void onClick(View v) {
                      String word = wordField.getText().toString();
                      String returnValue = romanjiToeng(word);
                      wordField.setText(returnValue);
             });
         }
    // Let's user know nothing was selected
    public void onNothingSelected(AdapterView<?> parent) {
         wordField = findViewById(R.id.editText);
```

```
translateButton.setText(nA);
         wordField = null;
    }
// Translates from English to Romanji
    public String engToRomanji (String num) {
         if (num.equals("1") ){
             num = "Ichi";
         }else if (num.equals("2")){
             num = "Ni";
         } else if (num.equals("3")) {
             num = "San";
         } else if (num.equals("4")) {
             num = "Shi";
         } else if (num.equals( "5")) {
             num = "Go";
         } else if (num.equals("6")) {
             num = "Roku";
         } else if (num.equals("7")) {
             num = "Sichi";
         } else if (num.equals("8")) {
             num = "Hachi";
         } else if (num.equals("9") ) {
             num = "Kyu";
         } else if (num.equals("10")) {
             num = "Ju";
         }
         return num;
    }
// translate from Romanji to English
    public String romanjiToeng (String num) {
         if (num.equals("Ichi")) {
             num = "1";
         }else if (num.equals("Ni")){
             num = "2";
         } else if (num.equals("San")) {
             num = "3";
         } else if (num.equals("Shi")) {
             num = "4";
         } else if (num.equals("Go")) {
             num = "5";
         } else if (num.equals("Roku")) {
             num = "6";
         } else if (num.equals("Sichi")) {
             num = "7";
         } else if (num.equals("Hachi")) {
             num = "8";
         } else if (num.equals("Kyu")) {
             num = "9";
         } else if (num.equals("Ju")) {
             num = "10";
         return num;
    }
}
```