Problem (/learn/data-driven-astro/module-11/15/)

Random Forest

Your task here is to complete the **`rf_predict_actual`** function. It returns the predicted and actual classes for our galaxies using a random forest 10-fold with cross validation.

You should use the **`RandomForestClassifier`** class from the **`sklearn.ensemble`** module. It can be instantiated with:

```
rfc = RandomForestClassifier(n_estimators=n_estimators)
```

`n_estimators` is the the number of decision trees in the forest.

`rf_predict_actual` takes two arguments: the **`data`** used throughout this activity and the number of estimators (**`n_estimators`**) to be used in the random forest.

The function should return two NumPy arrays containing the predicted and actual classes respectively.

You can copy and paste the functions from previous questions. However, we have provided the **`generate_features_targets`** function in the support library.

Use the **`cross_val_predict`** function from the **`model_selection`** module as we did in the last question.

You can read its documentation here (http://scikit-learn.org/stable/modules/generated/sklearn.model_selection.cross_val_predict.html). This approach allows us to get a prediction for every galaxy in the data set through cross validation. It also means that we don't need to manage the training and test sets.