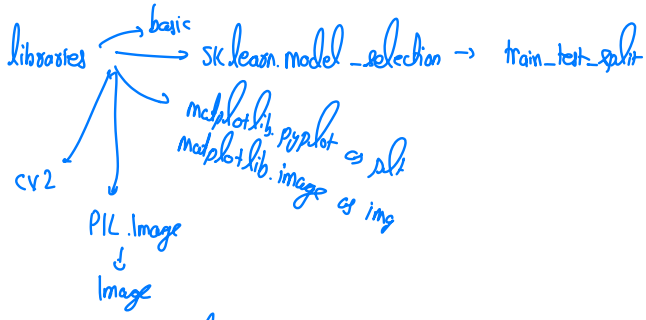
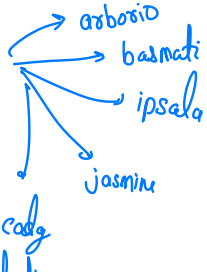
Goal: Classify what type of Rice it is



- Step1: Get data from path using pathlib.Path
- Step2: Convert Image to array using img.imread()
  and then plot them using imshow()

- Data → we have 5 categories of Rices



for easy access we create a dictionary
one for folder access & one for index wise access

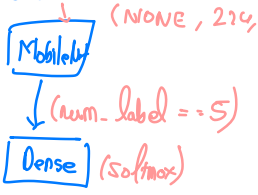
Example: `img = cv2.imread(str(df_images['arborio'][0]))`

- Step 3: Because later we will be using MobileNetV2 so
  it take input of dimension (224, 224, 3)
  so we need to resize our images
  & add them to X using cv2.resize()
- Step 4: Standardize the input image.

- Step5: Split the training data into train (80%) & test (20%)
  using train_test_split() method sklearn.model_selection

- Step 6: Import the MobileNet V2 using tensorflow_hub
  `mobile_net = hub.KerasLayer('___', input_shape = (224, 224, 3), trainable = False)`

- Step 7: Add the addition to our model



- Step 8: Compile the model
  - Optimizer = adam
  - loss = SparseCategoricalCrossentropy
  - Metrics = ['accuracy']

- Step 9: fit the model
  - epochs = 10
  - validation_data = (X_val, y_val)

- Step10: Evaluate the model & also Create a classification report
  using classification_report method in sklearn.metrics which gives following info about each class
  - Precision
  - Recall
  - F1 Score