```
 1 import os
 2 from PIL import Image
 3 import torch
 4 from f0601_662965513_Bartoletti import Net,
   ShapeDataset
 5 from torchvision import datasets, transforms
 6
 7 device = torch.device("cuda:0" if torch.cuda.
   is_available() else "cpu")
 8 model = Net().to(device)
 9 model.load_state_dict(torch.load('
   f0602_662965513_Bartoletti.ZZZ'))
10 model.eval()
11
12 dict_val_labels={0:'Circle', 1:'Square',2: 'Octagon'
   , 3:'Heptagon', 4:'Nonagon',5:'Star',
13                           6:'Hexagon',7:'Pentagon',8:'
   Triangle'}
14
15 transform = transforms.Compose([
16     transforms.Resize((100, 100)),
17     transforms.ToTensor(),
18     # transforms.Normalize(mean=(0),
19     # std=(1)),
20     # transforms.Normalize(mean,std)
21 ])
22
23 for file in os.listdir('test_set'):
24     img = Image.open('test_set/'+file).convert('L')
25     img = transform(img)
26     img = img[None,:,:,:]
27     img = img.to(device)
28     outp = model(img)
29     res = int(outp.argmax(dim=1,keepdims=False))
30     print(file + ':'+ dict_val_labels[res])
```