

```
model = resnet101(pretrained=False, num_classes=10).to(device)
criterion = nn.CrossEntropyLoss()
optimizer = optim.Adam(model.parameters(), lr=0.0001)
scheduler = lr_scheduler.StepLR(optimizer, step_size=10, gamma=1/3)
best_accuracy = 0.0
best_model_weights = model.state_dict()
num_epochs = 200

for epoch in range(num_epochs):
    model.train()
    running_loss = 0.0

    for inputs, labels in train_loader:
        inputs, labels = inputs.to(device), labels.to(device)

        optimizer.zero_grad()

        outputs = model(inputs)
        loss = criterion(outputs, labels)
        loss.backward()
        optimizer.step()

        running_loss += loss.item()
    scheduler.step()
    model.eval()
    correct = 0
    total = 0
```