

# What is Machine Learning?

# Chapter 5: Demo of Course Codes



```
22 def save_param(self):
23     param_layer = {}
24     for count in range(self.nlayer):
25         param_layer.append(deepcopy(self.info[count]["param"]))
26     self.param.append(param_layer)
27
28 def get_param_list(self):
29     return self.param
30
31 def add_layer(self, nunit, activation):
32     if self.nlayer == 0:
33         nin = self.nfeature
34     else:
35         nin = self.info[self.nlayer-1]["nOut"]
36     linfo = {"nin": nin, "nOut": nunit, "activation": activation}
37     linfo["param"] = {"W": np.random.randn(nunit, nin), "b": np.random.randn(nunit)}
38     linfo["param_der"] = {"W": np.zeros((nunit, nin)), "b": np.zeros((nunit))}
39     linfo["optimizer"] = {"W": None, "b": None}
40     self.info.append(linfo)
41     self.nlayer += 1
42
```