

Writing my own class...

```
class Meta_Ridge_nDim:
```

```
def __init__(self, alpha):
```

```
    self.alpha = alpha
```

```
    self.coef_ = None
```

```
    self.intercept_ = None
```

$$W = (X^T X + \alpha I)^{-1} \cdot (X^T Y)$$

```
def fit(self, X_train, Y_train):
```

```
# for a in range(X_train.shape[0]): # No need for iterations required...
```

```
    X_train = np.insert(0, 1, axis=1)
```

```
    I = np.identity(X_train.shape[1])
```

```
result = np.linalg.inv(X_train
```

```
result = (np.linalg.inv(np.dot(X_train.T, X_train) + self.alpha * I  
    .dot(X_train.T, Y_train)))
```

```
self.intercept_ = result[0]
```

```
self.coef_ = result[1:]
```

```
def predict(self, X_train):
```

```
    return np.dot(self.coef_, X_train) + self.intercept
```