【错误的】

h = sigmoid(X\*theta);

J\_partial= (1/m)\*(log(h).\*(-y)-log(1-h).\*(1-y));

J\_regularization = lambda\*(1/2\*m)\*(theta'\*theta);

J = J\_partial+J\_regularization;

grad\_partial= (1/m).\*((X).\*(h-y));

grad\_regularization = lambda\*(1/m)\*theta;

grad\_regularization= [0;grad\_regularization];

grad = grad\_partial + grad\_regularization;

【正确的】

h = sigmoid(X\*theta);

J\_partial = (1/m).\*sum((-y).\*log(h)+(y-1).\*log(1-h));

J\_regularization= (lambda/(2\*m)).\*sum(theta(2:end).^2);

J = J\_partial+J\_regularization;

grad\_partial = (1/m) \* (X' \* (h -y));

grad\_regularization = (lambda/m).\*theta(2:end);

grad\_regularization = [0; grad\_regularization];

grad = grad\_partial+ grad\_regularization;