**EX-1**

1. **computecost**

J = (1/(2\*m))\*(sum(((X\*theta)-y).^2))

1. **gradientDescent**

theta = theta – (1/m)\*(alpha)\*(X’)\*(X\*theta-y);

1. **plotData**

data = load(‘ex1data1.txt’);

X = data(:,1);

y =data(:,2);

plot(X,y,’rx’,’MarkerSpace’,10);

xlabel(‘Profit in $10,000s’);

ylabel(‘Population of city in 10,000s’);

1. **warmupex**

A = eye(5);