```matlab
%suchitte@aios.vision
%brainWeightPredictor
a = load('Untitled.txt');
a = [ones(length(a),1),a];
mean=0;
range=0;
%{
%feature scaling
for iter = 1:2
    for iter1 = 1:length(a)
        sum(a(:,iter+1));
    end
    mean = mean/length(a);
    range = max(a(:,iter+1))-min(a(:,iter+1));
    for iter2 = 1:length(a)

        a(iter2,iter+1)=(a(iter2,iter+1)-mean)/range;

    end
    mean = 0;
    range = 0;
end
%}

%data
y = a(:,2);
X = [a(:,1),a(:,3)];
theta = zeros(2,1);


%parameters
iteration = 150;
alpha = 0.001;

m = length(y);
delta = 0;
J_history = zeros(iteration,1);

%gradient descent
for i = 1:iteration
    prediction = X * theta;
    delta = X'*(prediction-y);
    theta = theta - ((alpha*delta)/m) ;
    J_history(i) = computeCost(X, y, theta);
    delta = 0;
end

%output
figure
subplot(2,1,1);
plot(a(:,3),a(:,2),'rx','MarkerSize',10);
hold on
plot(X(:,2),X*theta,'-');
axis([0 40 0 7.5]);
xlabel('BodyWeight');
ylabel('BrainWeight');
subplot(2,1,2);
plot(1:iteration,J_history,'-');
hold on
```

```
xlabel('NumberOfIterations');
ylabel('cost value');
```