Binary classification:

In a binary classification task, our goal is to find a model that classifies objects as 1 or 0. Using logistic regression, we can get the following model.

$$p_{\theta_0, \theta_1, \theta_2}(x_1, x_2) = \frac{1}{1 + e^{-(\theta_0 + \theta_1 x_1 + \theta_2 x_2)}}$$

The set of all hypotheses that an algorithm can learn is known as its hypothesis space. Each of these models is called a hypothesis.

Regression:

Linear Regression assumes that the continuous outcome is a linear combination of the features. So, if $x_1, x_2, ..., x_n$ are the features, the hypotheses are of the form.

$$\widehat{y}(x_1, x_2, \ldots, x_n) = \theta_0 + \sum_{j=1}^{n} \theta_j x_j$$