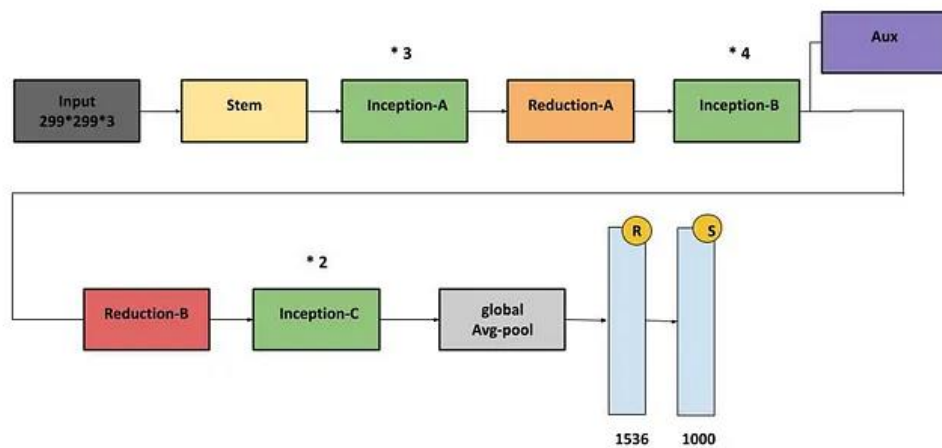# inception v3 architecture diagram

The diagram shows the different layers of the network, with the input layer at the bottom and the output layer at the top. The layers are arranged in a hierarchical fashion, with each layer taking the output of the previous layer as its input.

The first few layers of the network are responsible for extracting low-level features from the input image, such as edges and shapes. The later layers of the network combine these low-level features to extract more complex features, such as objects and scenes.

The Inception-v3 network uses a number of different building blocks, including convolutions, pooling, and concatenation. Convolutions are used to extract features from the input image, pooling is used to reduce the size of the feature maps, and concatenation is used to combine the outputs of different convolutions.

The Inception-v3 network also uses an auxiliary classifier. The auxiliary classifier is a small network that is attached to the middle of the main network. The auxiliary

classifier helps to improve the training of the main network by providing feedback on the lower layers.

The Inception-v3 network is a powerful image classification model that has been used to achieve state-of-the-art results on a variety of image classification tasks.

Here are some of the key features of the Inception-v3 architecture:

- Uses a variety of building blocks, including convolutions, pooling, and concatenation.
- Uses an auxiliary classifier to improve training.
- Achieves state-of-the-art results on a variety of image classification tasks.