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Description générée automatiquement**Importing Libraries:**

Explanation:

* Libraries are imported, including **namedtuple** for creating tuple subclasses with named fields, and various modules from PyTorch for neural network operations.
* **load\_state\_dict\_from\_url** is imported from a custom module (**.utils**) to load pre-trained weights from a URL.

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Description générée automatiquement**Model URLs and Named Tuples:**

Explanation:

* A dictionary **model\_urls** contains URLs for pre-trained models. Here, it specifies the URL for the Inception v3 model.
* A named tuple **InceptionOutputs** is defined to hold the output tensors from the Inception model. It includes fields for main logits and auxiliary logits.

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Description générée automatiquement**Inception v3 Model Definition:**

Explanation:

* The **Inception3** class is defined, representing the Inception v3 model.
* The class inherits from **nn.Module**, indicating it's a PyTorch neural network module.
* It includes methods for initialization (**\_\_init\_\_**) and forward pass computation (**forward**).
* The model architecture is implemented within this class.

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Description générée automatiquement**Inception Blocks and Helper Functions:**

Explanation:

* Several helper classes like **InceptionA**, **InceptionB**, **InceptionC**, etc., are defined. These represent different blocks used in the Inception architecture.
* **BasicConv2d** is a basic convolutional block used within the Inception blocks.

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Description générée automatiquement**Instantiation Functions:**

Explanation:

* The **inception\_v3** function serves as a factory method to create Inception v3 models.
* **\_forward** and **forward** methods are defined within **Inception3** class. **\_forward** is a helper method that defines the forward pass without transformation, and **forward** applies transformations before calling **\_forward**.