1. In a *Multi-Class* classification scenario, your model cannot identify all the different items and people that are present in a given input image.
2. Object localization is where you get a bounding box around the main subject of the image, while in object detection you getty a bounding box around all the objects with an image.
3. Semantic segmentation is the method that locates an object(s) by labelling the pixels, where each similar object(s) is assigned to the same class.
4. In the context of transfer learning, the initial training task where the model learns reusable patterns is called pre-training task. The task for which the model is borrowed is called downstream task.
5. The scenarios in which transfer learning could be beneficial are:
    a. When you do not have enough data for the task you want to perform. Which resembles another same or similar, already trained task.
    b. To reduce computation and processing cost.
    c. When the task you want to perform is a sub-task of an already trained, larger, model.
6. UpSampling2D is the name of the built-in Tensorflow layer-type which we can use to increase the dimensions of a 2D image.
7. You have an image of dimensions 48 x 48, and you want to upscale it to 240 x 240 using the built in Tensorflow layer-type which is used to perform such a task. The parameter size = (5,5) we must pass.
8. Include_top = False means it discards the top most layers of the pre-trained model when initializing the layer using it.
9. Regression is used in the output layer that is used to predict bounding boxes.
10. Statements that are true regarding intersection over union (IOU):
    a. The closer the value fo the IOU is to 0 the poorer is the prediction of the bounding box.
    b. IOU is the area of intersection of the two boxes(true and predicted) divided by the total union area of the two boxes.