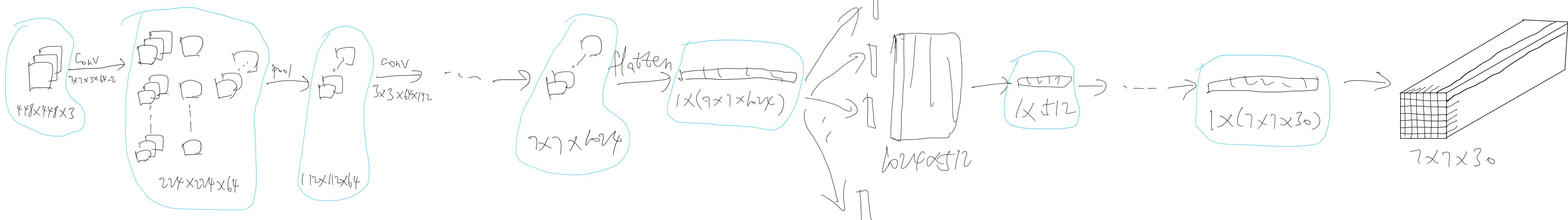
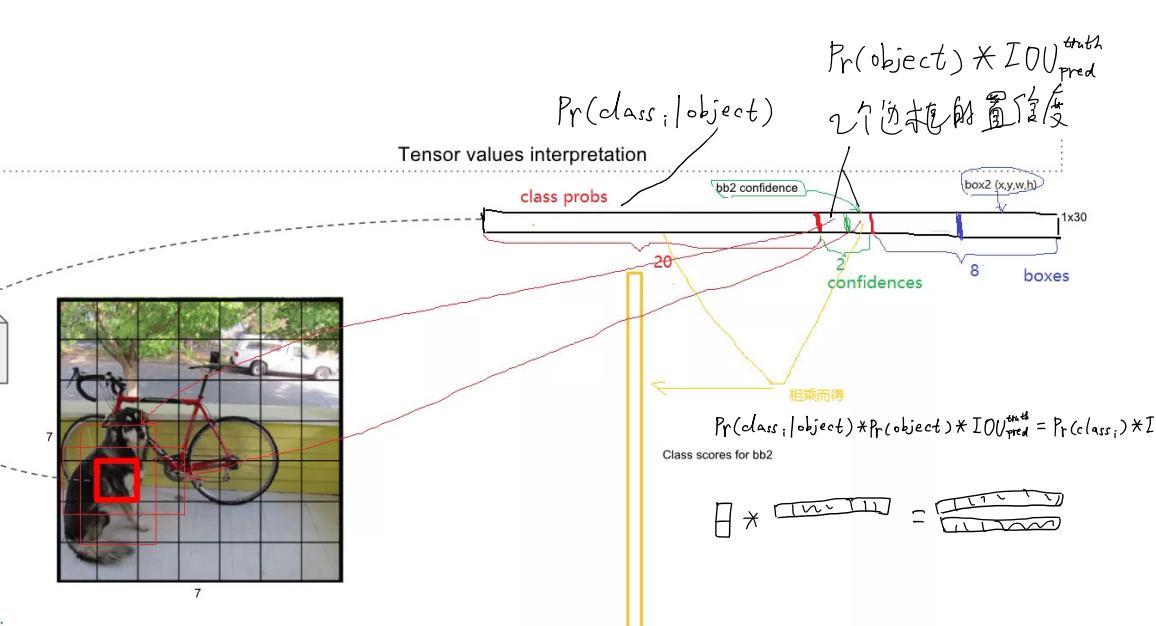
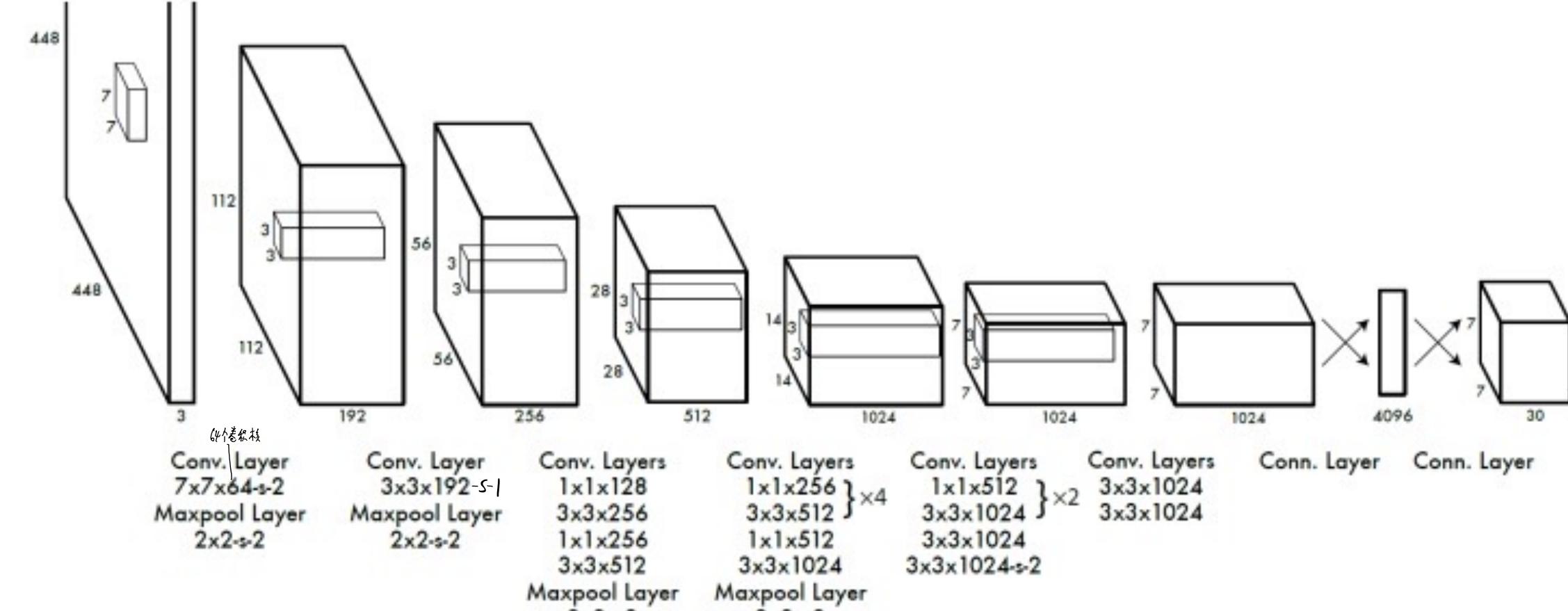
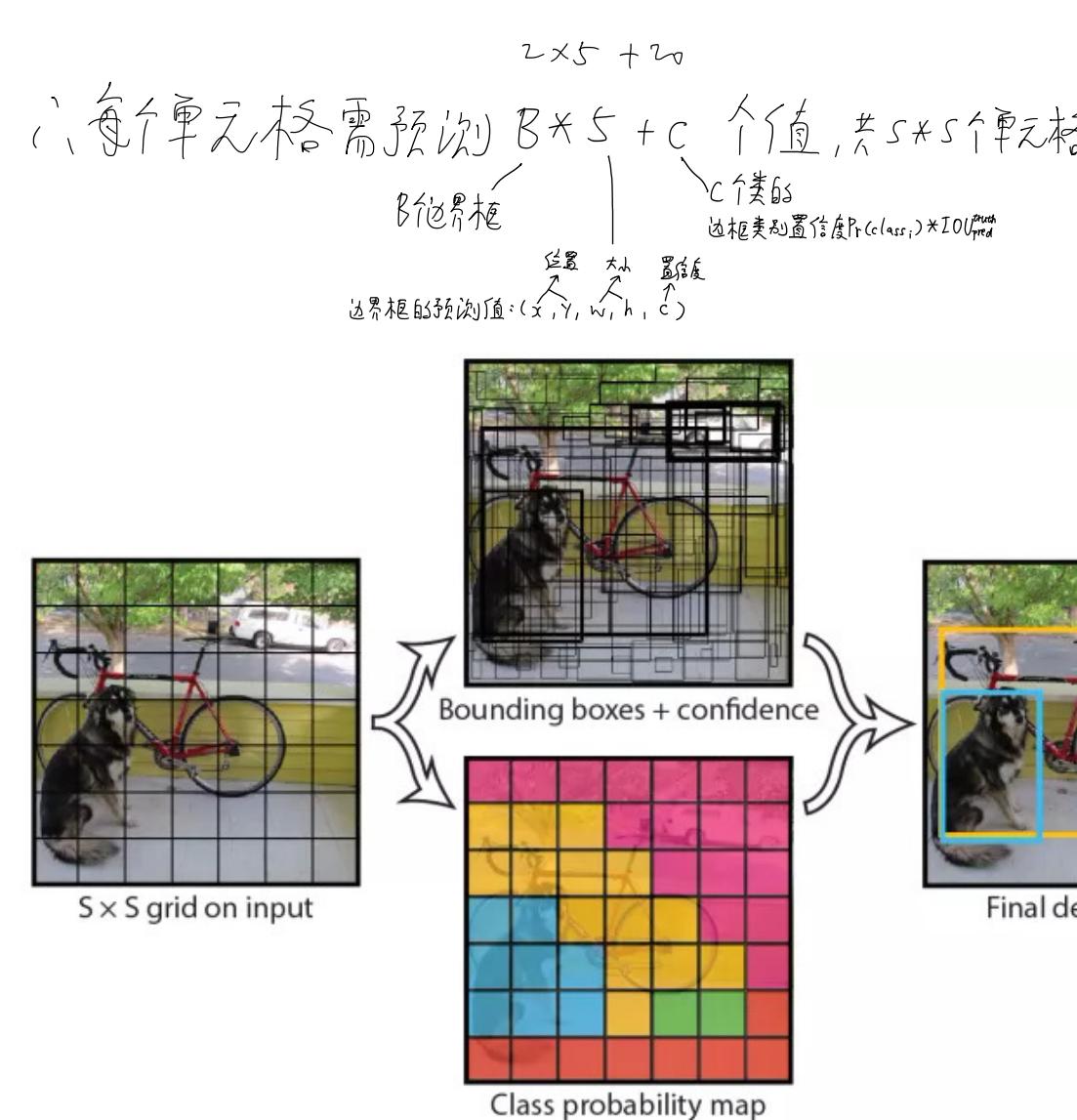
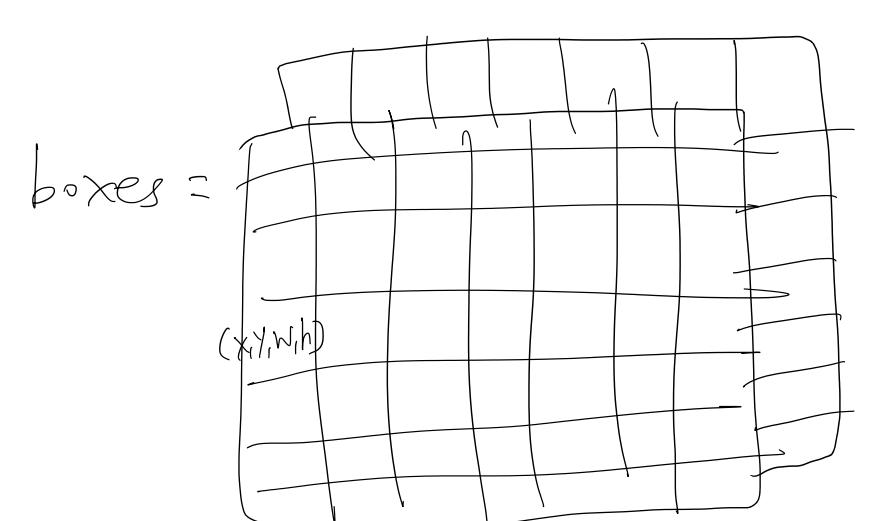
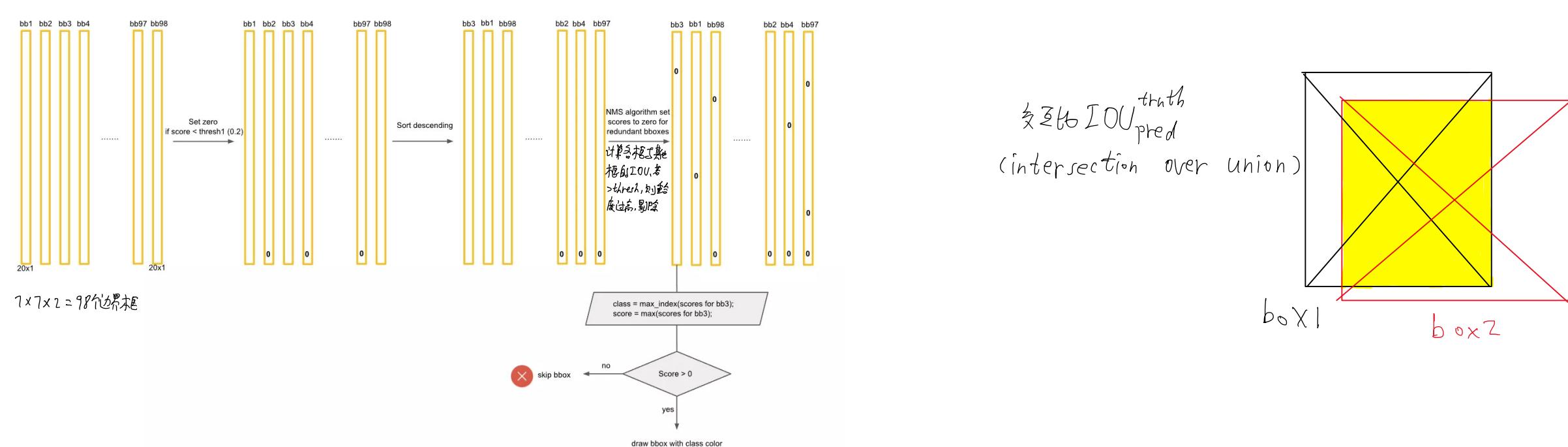


每个单元格预测 B 个边框
 B 个边框
 $B \times C$ 个值
 C 个类别
类别的置信度 (Confidence Score):
①单个框的置信度: $P_{\text{object}}(t_i)$
②边框的置信度: IoU_{pred}
置信度 = $P_{\text{object}} \times \text{IoU}_{\text{pred}}$
类别的预测值: (x, y, w, h, c)
类别的置信度 class-specific confidence scores:
 $P_{\text{class}, i} = P_{\text{object}} \times \text{IoU}_{\text{pred}}$



$$\text{损失函数} = \lambda_{\text{coord}} \sum_{i=1}^B \sum_{j=1}^C \mathbb{1}_{ij} [(x_i - \hat{x}_i)^2 + (y_i - \hat{y}_i)^2] + \lambda_{\text{coord}} \sum_{i=1}^B \sum_{j=1}^C \mathbb{1}_{ij} [(\sqrt{x_i} - \sqrt{\hat{x}_i})^2 + (\sqrt{y_i} - \sqrt{\hat{y}_i})^2] + \sum_{i=1}^B \sum_{j=1}^C \mathbb{1}_{ij} (c_i - \hat{c}_i)^2 + \lambda_{\text{no obj}} \sum_{i=1}^B \sum_{j=1}^C \mathbb{1}_{ij} (c_i - \hat{c}_i)^2 + \sum_{i=1}^B \sum_{j=1}^C \mathbb{1}_{ij} \sum_{c \in \text{classes}} (p_j(c) - \hat{p}_j(c))^2$$

非极大值抑制 NMS, non maximum suppression



1	2	3	4	5	6
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5

