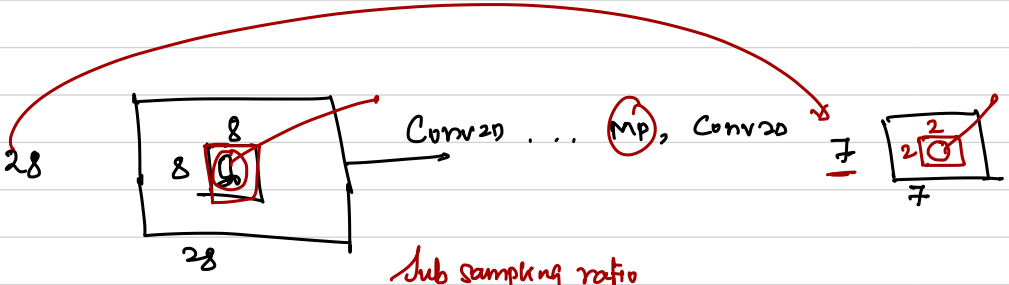
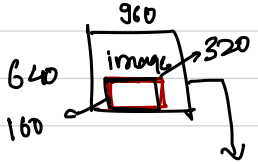
Fast RCNN

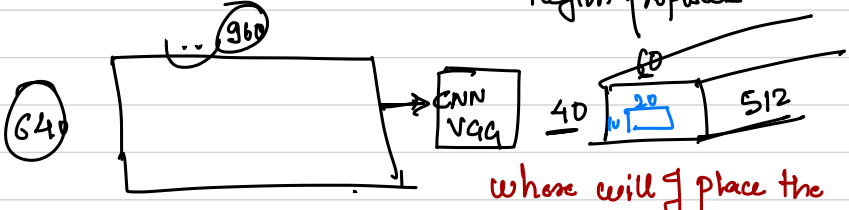


Sub sampling ratio



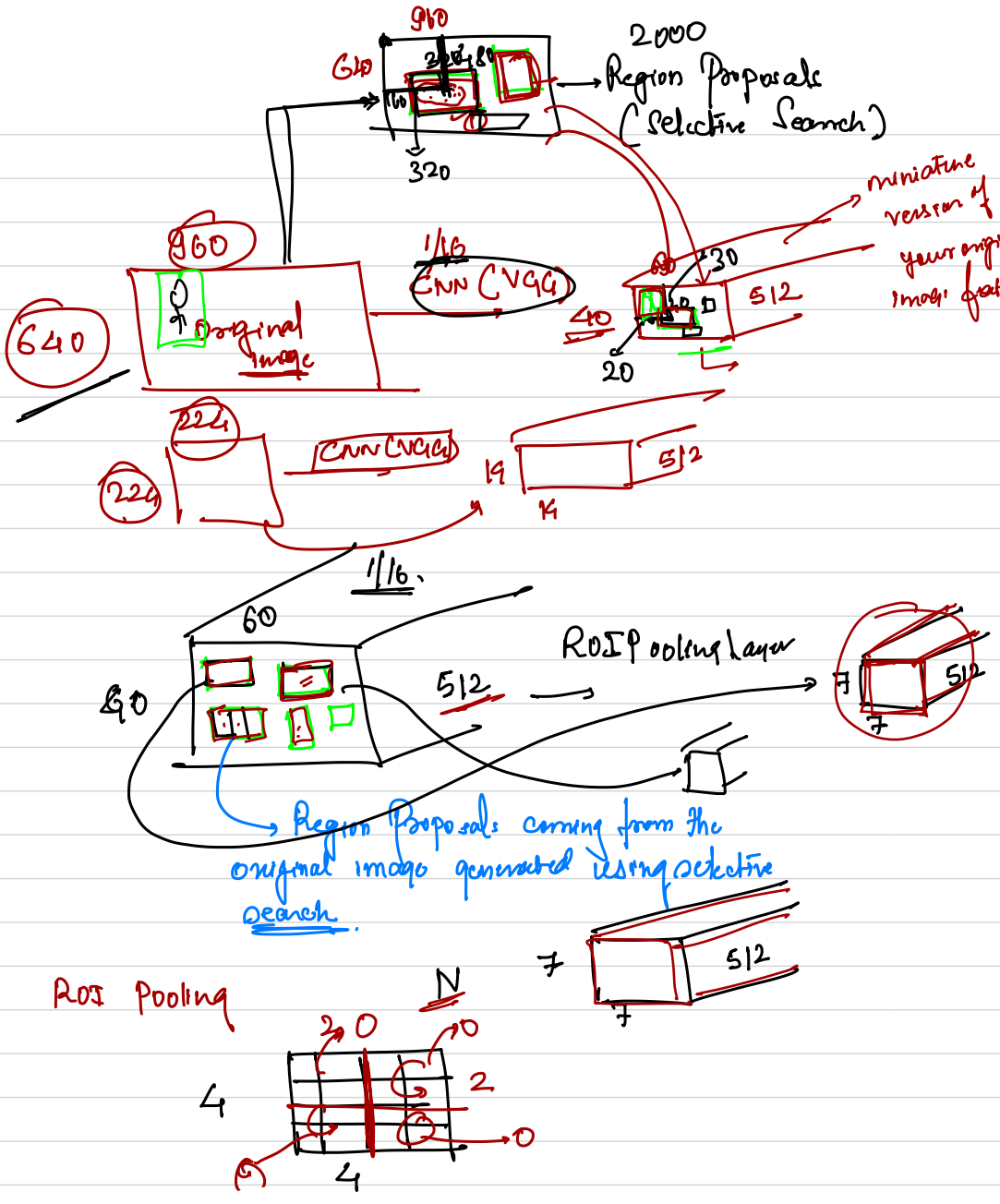
Selective Search

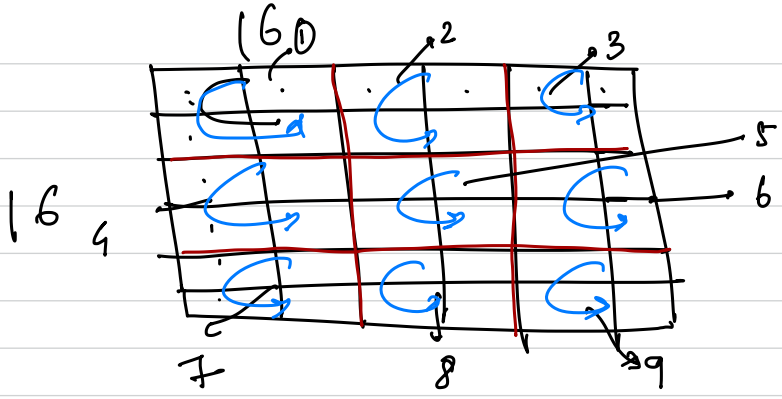
↘ Region Proposals

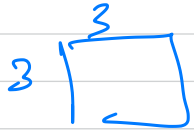


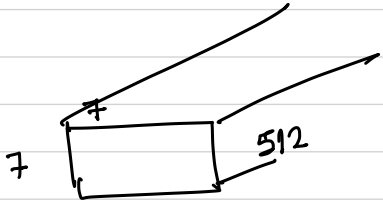
Where will I place the Region proposal that you generate from the image on the FM

Subsampling 224/14 = 16.

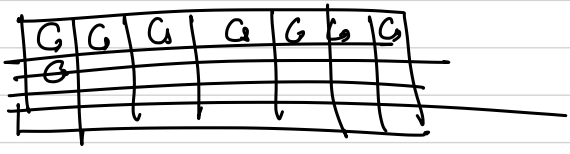

960
640
320
2000
Region Proposals
(Selective Search)
960
640
original image
1/16
CNN (VGG)
miniature version of your original image features
512
40
20
224
224
CNN (VGG)
14
14
512
1/16.
60
40
512
ROI pooling Layer
7
7
512
Region Proposals coming from the original image generated using selective search.
7
7
512
ROI Pooling
N
2
0
0
2
4
4

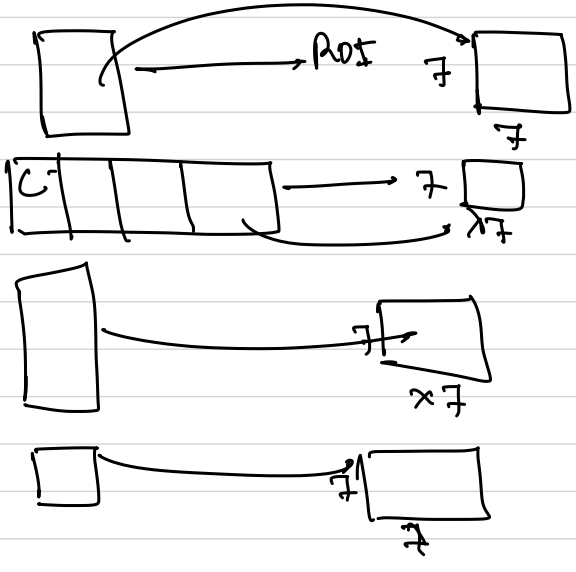

16
1
2
3
4
5
6
7
8
9

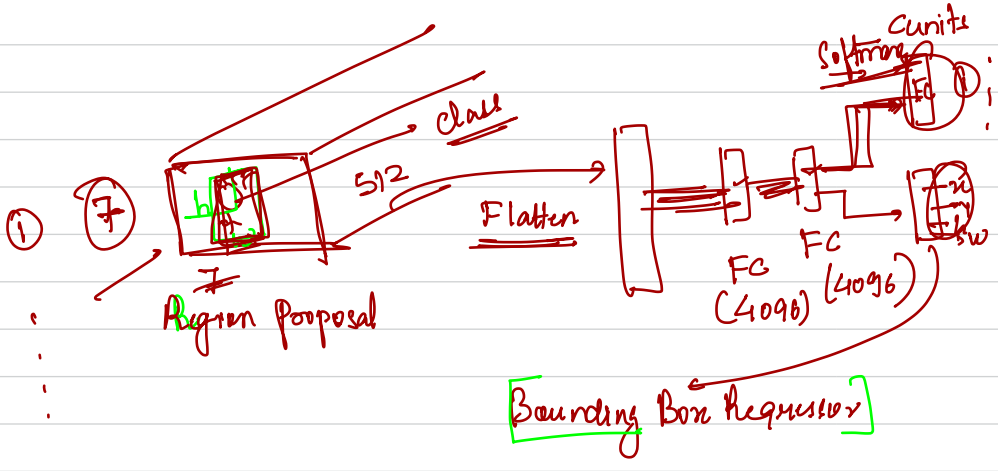

3
3


7
512

Every region proposal mapped on the feature map will be pooled using the 7x7 grid






Region Proposal
Class
512
Flatten
FC
(4096)
FC
(4096)
Softmax
Bounding Box Regression