7.003 Spring 2022
Day 10 In-Lab Questions

1) You are ligating your genomic DNA digests today.

   A) Why are you performing this ligation reaction? Draw what your final desired ligation product will look like.

   B) What is a typical volume for a ligation reaction? Why is the volume you are using today for your ligation much larger?

2) For the next step of our plasmid recovery procedure, we will perform an inverse PCR to amplify the desired yeast genomic DNA region. Describe an alternate method (instead of PCR) that could be used to isolate and amplify the specific yeast genomic DNA region we want to identify from our ligation products. What are some advantages and disadvantages of using either method?

3) List at least four key differences in the overall setup, procedure, and/or analysis of Sanger sequencing vs. next-generation sequencing.

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