Lecture 9 Report Requirement

The report only needs to answer the questions below.

Send your report in PDF format to 1430090453@qq.com, named as "report9_[first name][last name].pdf" (e.g., report9_ZhangChen.pdf). Please also include your name (both English and Chinese) at the beginning of the report. The report is due on 10 am, China Standard Time, **April 23**, 2020.

Report Questions:

"SAVI: Synthetic apertures for long-range, subdiffraction-limited visible imaging using Fourier ptychography"
1. How to reduce the effects of reflection of USAF?
2. How to align captured image in this environment setup and in space?
3. What's the difference of rough object's phase comparing to smooth object's? And why?
4. Briefly explain the recovering process of high-resolution.
5. How does the contrast of image affect the performance?

"WISH: wavefront imaging sensor with highresolution"
6. What are the traditional wavefront sensors? And what's their drawback?
7. How to design SLM pattern? What are the requirements?
8. Briefly explain the process of phase-retrieval.
9. What's the advantage of lensless microscopy?
10. How to improve WISH？