Task 1

Imagine the following situation: you are joining a cross-functional team which builds a front-end application using REST APIs. You are a first QA engineer and need to establish a QA process in the team.

1. What would you do in your first few days of work? Where would you start?
2. Which process would you establish around testing new functionality?
3. Which techniques or best practices in terms of code architecture and test design would you use in your automated tests?

1. What would you do in your first few days of work? Where would you start?

1. At the first few days I would spend some time to get familiar with the entire product
2. Then I would focus on that part of product, which my team is working on, I would set a meeting with a PM to understand business value and what are we working on right now, and with team lead, to discuss the high level architecture of our team product
3. Then I would read the requirements, design and API documentations
4. I would create a test plan for API testing
5. I would cover an existing requirements with the test cases
6. I would go through test plan and test cases to get more familiar with the product and to estimate the quality of the product

2. Which process would you establish around testing new functionality?
1. QA should be included in the early stage, and as soon as requirements are ready, it should be validated by QA on completeness, clarity, verifiability
2. As soon as requirements are ready, QA covers it with test cases
3. Smoke and regression tests are selected
4. When feature is ready, it goes to QA:
   4.1 Smoke tests are executed
   4.2 Integration test are executed
   4.3 Cross-browser/platform tests are executed
   4.4 Regression testing is executed
   4.5 (If any other types of testing are necessary, they also should be executed)
5. If any bugs were found at step 4, all bugs should be reported, prioritized and validated by developers
6. Feature should be retested after bug fixing
7. When no more bugs are found, the feature should be sent to product/design (if there is a product/design validation needed)
8. The feature should be released by software developer/release engineer
9. Test cases for API which were picked up as part of regression testing should be automated

10. Test cases for UI which were picked up as part of regression testing should be automated

3. Which techniques or best practices in terms of code architecture and test design would you use in your automated tests?
   1. I would start automating from a good manual test cases
   2. On the first step I would cover regression test-cases for the API, I would pick up POSTMAN or "requests" for Python in this case
   3. I would cover UI regression, I would stick with Page Object, and as an automation tool I would take Robot Framework for Python