Assignment 1: DevOps

1. What are the benefits of DevOps? What can it help us to achieve?

2. How would you describe a successful DevOps engineer or a team?

3. In typical IT organizations why is there a typical conflict between development and

   operations teams?

   a) Because they come from different backgrounds.
   b) Because development team knows more about software products and services.
   c) Because operations team knows more about test and production environments.
   d) Because they have conflicting business goals and priorities.

4. Why is the concept 'value stream' so important in DevOps?

   a) The value stream helps employees to see and understand their daily tasks.
   b) The value stream helps to analyze the as-is map and any attempts to improve metrics.
   c) The value stream helps to identify when someone did their part of the work.
   d) The value stream helps to realize a smooth and uniform flow through all process steps.
   e) The value stream helps to realize local optimization in the current work practice.

5. What is an advantage of having a DevOps team work together for a longer period?

   a) The team does not have to improve the process anymore.
   b) The team uses their experience to innovate and improve the process.
   c) The team will start working more independently.
   d) There is time left to process unexpected requests more often.

6. Configuration management makes it possible to scale IT infrastructure and software systems, without needing more people working on them. How should changes to such a scaled environment ideally be done?

   a) Through continuous integration
   b) Through fully controlled scripts
   c) Through test automation
   d) Through the deployment pipeline

7. In traditional practices many things can go wrong with releases: some changes are not documented, the system has not been backed up fully, or there is no previous state of the system saved. How does DevOps ensure frequent releases without these problems?

   a) By automating releases

   b) By letting Operations release

   c) By making releases very small

   d) By not documenting all changes

8. What determines which DevOps principles and practices will BEST benefit an organization?

   e) Business strategies and goals

   f) The commitment of early adopters

   g) The availability of advanced tools

   h) IT's capabilities and resources

9. Which of the following is required for Continuous Integration?

   a) Automated unit, integration and acceptance testing

   b) Automated release management

   c) Continuous delivery pipeline

   d) Deployment pipeline

10. Why should everything be stored in a version control system?

    a) It allows Developers to re-use already written code

    b) It gives both Development and Operations access

    c) It is the basis for automation of the deployment pipeline

    d) It prevents deliberate introduction of chaos in the system