# Al task 06

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## Task 1: Search for Data ops

### and what is the difference between Dataops and DevOps?

Dataops is the practice of analysts, data scientists, developers, and operations participating together in the entire service life cycle.

### DataOps definition from Andy Palmer:

"DataOps is a data management method that emphasizes communication, collaboration, integration, automation, and measurement of cooperation between data engineers, data scientists, and other data professionals."

#### on the other hand

DevOps is a set of practices, tools, and a cultural philosophy that automates and integrates the processes between software development and IT teams. ... The term DevOps, a combination of the word's development and operations, reflects the process of integrating these disciplines into one, continuous process.

#### DevOps benefits

- Speed
- Rapid Delivery
- Reliability
- Scale
- Improved Collaboration
- Securit

#### Task 2: What is the use of calculus in ai?

integral calculus is used in many places throughout machine learning and deep learning, Probability theory is the source of many if not most of the integrals that appear in machine learning.

Differential calculus is used to calculate the gradient in back-propagation (which is, in itself, just a stochastic gradient descent approach). This occurs in neural nets, but gradient descent is a very common technique used in many other Machine Learning approaches.

Furthermore, integral calculus might be used in theoretical results (proving convergence, error bounds

# Task 3: What is the difference between Integration and Deployment and what is the best in terms of performance??

Continuous Integration is the practice of testing each change done to your codebase automatically and as early as possible. Continuous Deployment follows the testing that happens during Continuous Integration and pushes changes to a staging or production system

## In terms of performance

Continuous deployment is better than Continuous Integration.

## Task 4: Mentoring tools

A mentorship partner agreement.

Goal-setting templates.

Conversation starters.

Sample meeting agendas.

Progress check-in templates.

A relationship closure plan.

# Task 4: What is the importance of differential in training?

speed the skill acquisition process through the use of novel inputs that theoretically force the body to find the most efficient way to complete the task