# Introduction

CI/CD pipeline is automated process which deploys code from a repository.

For example we can create a CI/CD pipeline which builds and pushes a Docker image to a container registry. It can work like this:

* Wait until someone pushed a commit to the repo
* Once commit is pushed, build a Docker image using code from the repo
* Push built Docker image to a container registry

Or we can create a pipeline which pulls a Docker image from a container registry and runs it on a server. It can work like this:

* Wait until a Docker image is pushed to a container registry
* Once a new Docker image has been pushed, pull it onto a server and run it.

A CI/CD pipeline can perform all the actions defined in it by using special functions provided by the tool which we are using for building that pipeline.

Popular tools for building CI/CD pipelines are:

* Azure DevOps (Azure Pipelines)
* GitHub Actions
* Jenkins

Popular functions which we can use in a CI/CD pipeline includes:

* Build a Docker image using code from a specific repo and push it to a container registry
* Execute a bash script

# YAML definition

We can define a CI/CD pipeline as a YAML file. We define there all the steps which needs to be done in a pipeline.