

# FEniCS installation

## Ubuntu

To install FEniCS in Ubuntu system, run the following commands in terminal:

```
sudo apt-get install software-properties-common
sudo add-apt-repository ppa:fenics-packages/fenics
sudo apt-get update
sudo apt-get install fenics
```

## Windows 10

Prerequisites:

- Ubuntu 18.04 LTS app
- Xming

After installing Ubuntu 18.04 LTS app on the Windows-10 machine, FEniCS can be installed using the commands explained in Section 3.1. Here Xming should be invoked before executing the code in order to visualize the results.

## Gmsh installation - Ubuntu

```
sudo apt-get install gmsh
```

After meshing the resultant 'msh' file can be read into FEniCS code in the 'xml' format. This can be achieved using *dolfin-convert* command.

```
dolfin-convert input.msh output.xml
```

## ParaView installation - Ubuntu

```
sudo apt-get install paraview
```