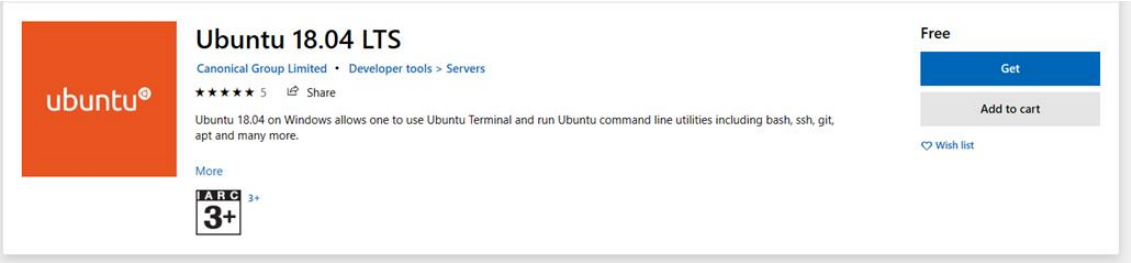
SETUP

Download the source code:

Back-end application – https://github.com/volodymyrLeno/Robidium

Front-end application – https://github.com/stdevi/robidium-frontend

To discover data transformations, the tool requires Ubuntu terminal that can be downloaded from the Microsoft Store:



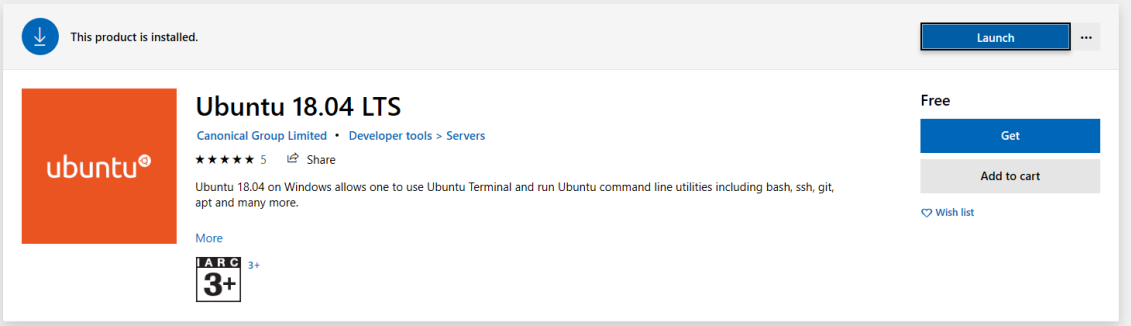
Before installing any Linux distributions on Windows, you must enable the "Windows Subsystem for Linux" optional feature.

For this, open PowerShell as Administrator and run command:

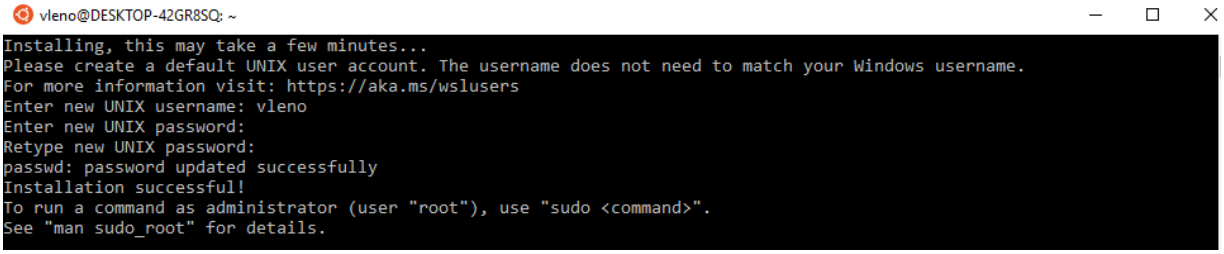
```
dism.exe /online /enable-feature /featurename:Microsoft-Windows-Subsystem-Linux /all /norestart
dism.exe /online /enable-feature /featurename:VirtualMachinePlatform /all /norestart
```

You will have to restart the system for all the changes to be applied

After Ubuntu terminal is downloaded open it by clicking button “*Launch*”.



Wait for the installation to finish. You will have to set the username and password.



In Ubuntu terminal execute the following commands:

```
sudo apt update
sudo apt upgrade
sudo apt install python2.7
sudo apt install python-pip
python -m pip install -U pip setuptools
sudo apt-get install libboost-all-dev
```

Install all required python modules:

```
python -m pip install numpy
python -m pip install tabulate
python -m pip install cherrypy
python -m pip install editdistance
python -m pip install python-Levenshtein
python -m pip install matplotlib
```

Navigate to */foofah* directory in the source code of the tool via Ubuntu terminal:

```
vleno@DESKTOP-42GR8SQ:/$ cd mnt
vleno@DESKTOP-42GR8SQ:/mnt$ cd c/Volodymyr/Robidium/foofah
vleno@DESKTOP-42GR8SQ:/mnt/c/Volodymyr/Robidium/foofah$
```

Run command:

```
sudo python setup.py install
```

Install Node.js – https://nodejs.org/en/

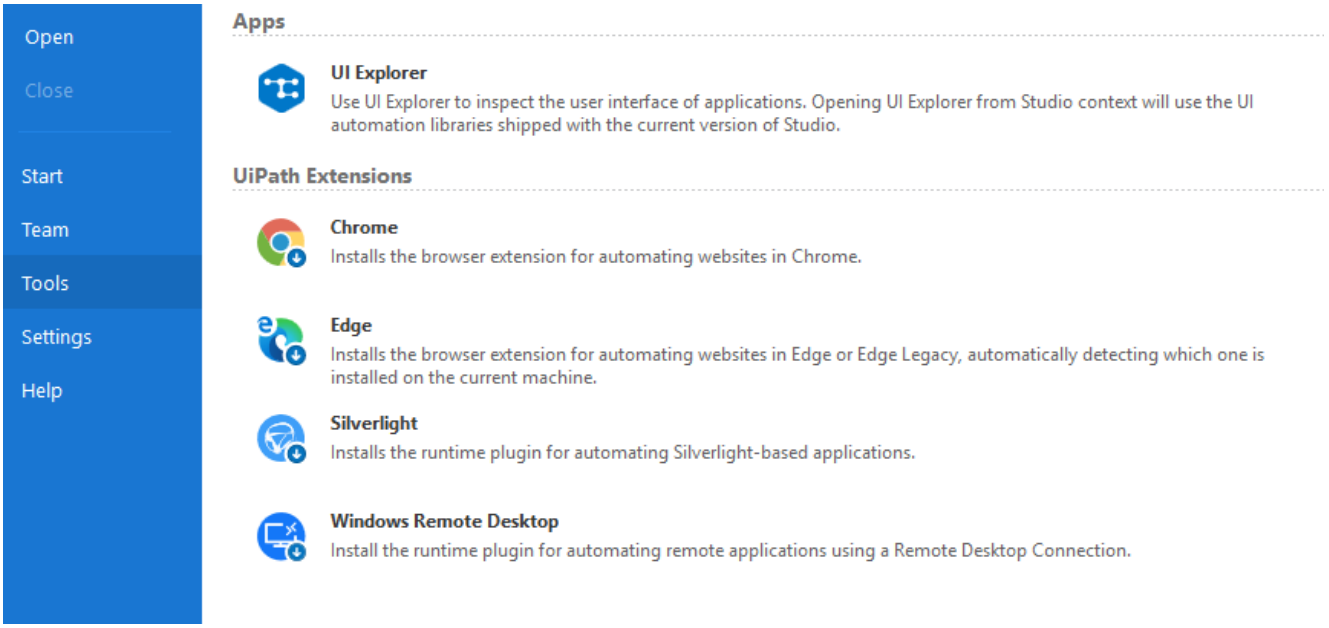
Navigate to */front-end* directory and run the next commands:

```
npm install
```

```
npm install -g create-react-app
```

```
npm install react-scripts
```

Open UIPath client. Navigate to “Tools” and select Chrome to install the corresponding extension.



USAGE

1) To run the front-end:

   Using command line or PowerShell navigate to \front-end directory and run “npm start”

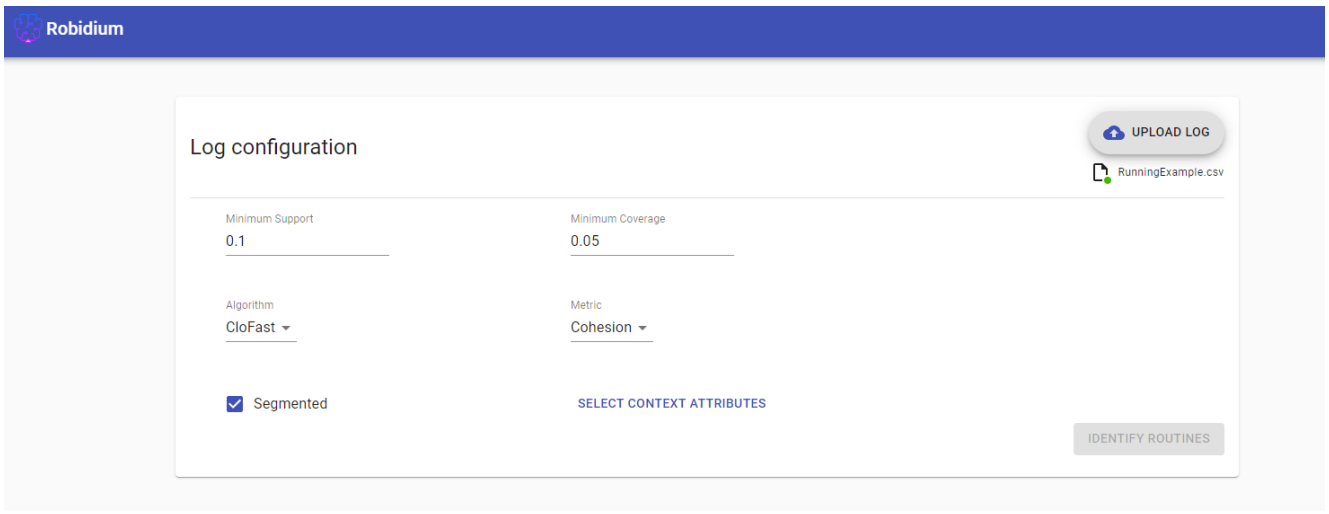
2) To run the back-end:

   In PowerShell navigate to the main directory of the tool and run “./mvnw spring-boot:run”

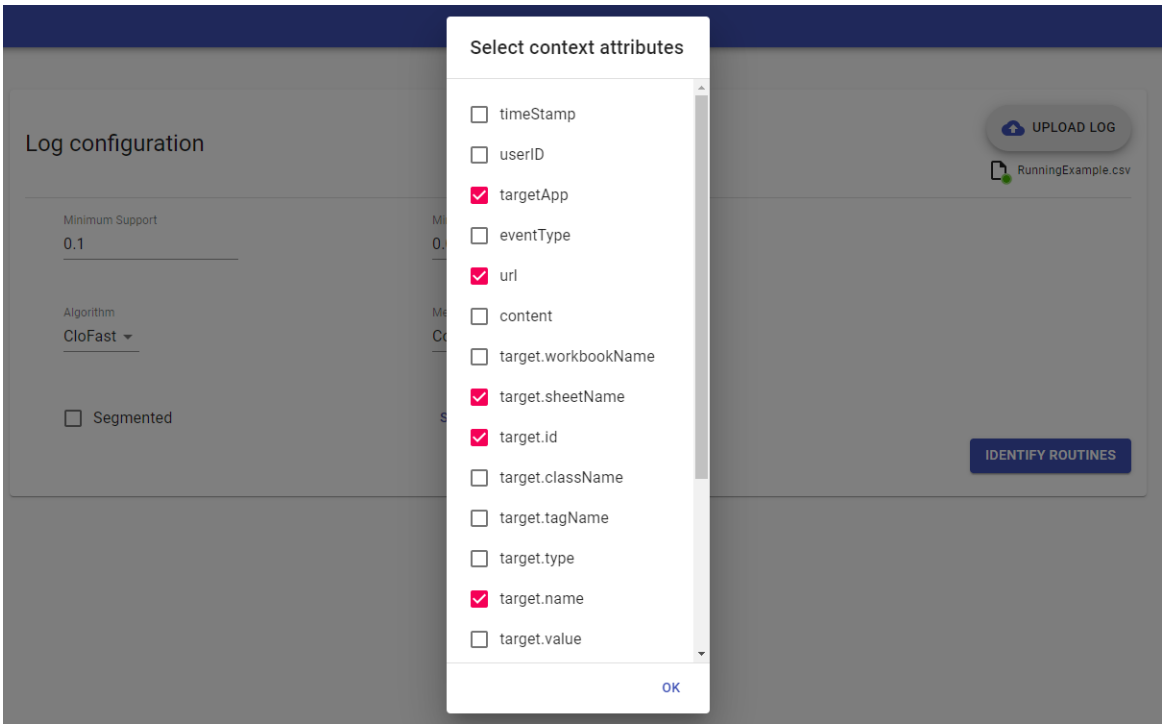
3) The tool is available at http://localhost:3000

4) Upload the UI log and specify the input parameters

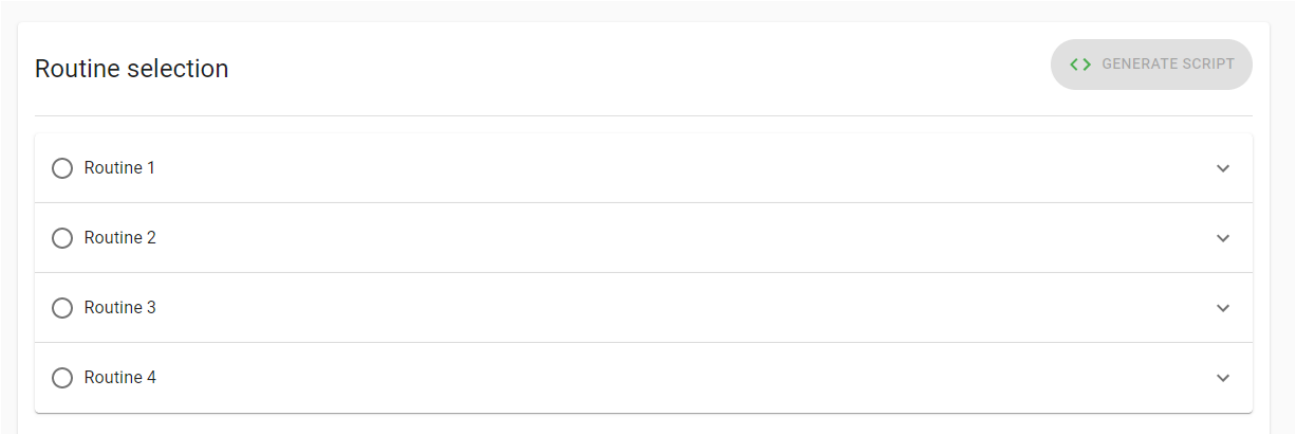
   - Minimum support (used to discover only frequently repetitive routines)
   - Minimum coverage (used to filter out short routines with low frequency)
   - Algorithm (sequence pattern mining algorithm to extract frequent routines, currently BIDE+ and CloFast algorithms are supported)
   - Metric (specifies routine selection strategy)
   - Segmented (specifies whether the given log is already segmented, or it requires segmentation first)



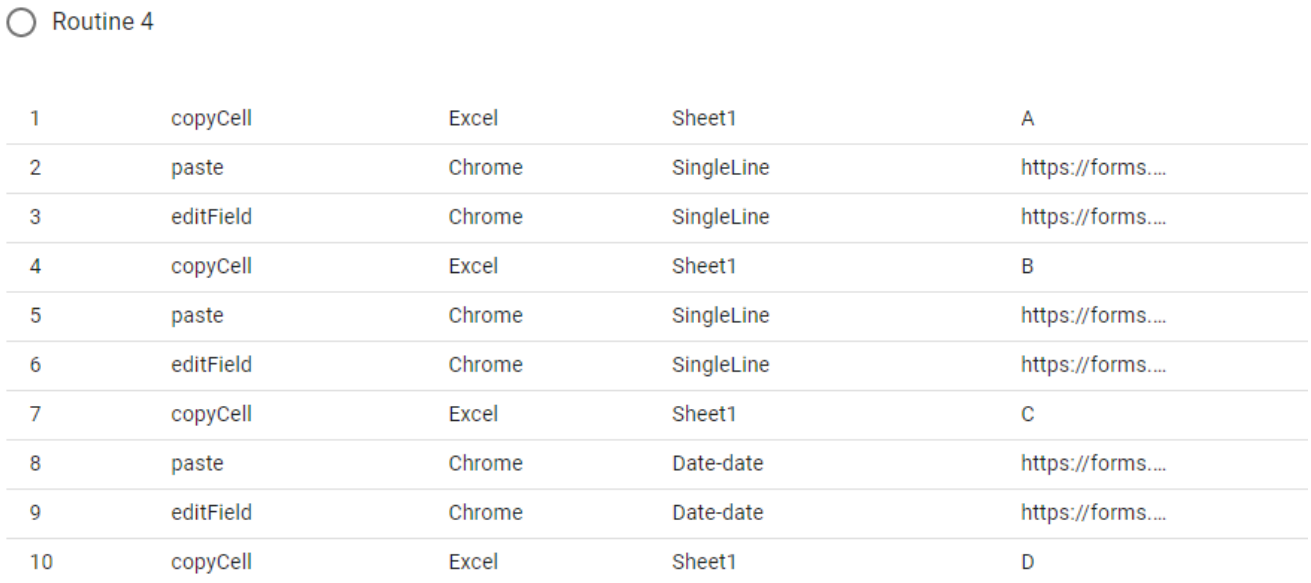
5) Select context attributes:



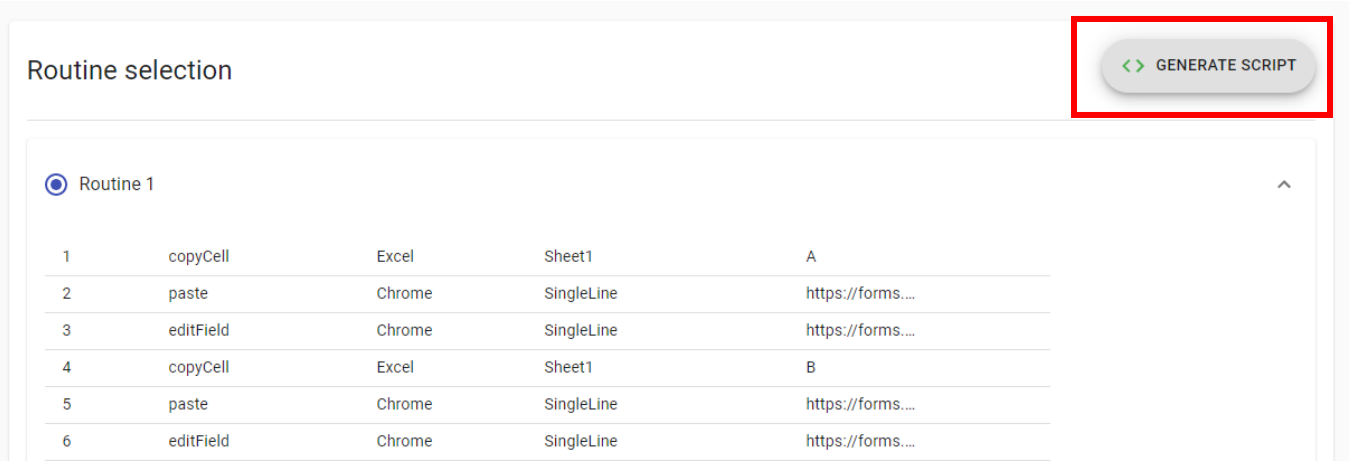
6) Click button *Identify Routines* to extract automatable routines from the log. Discovered routines will be available under Routine selection



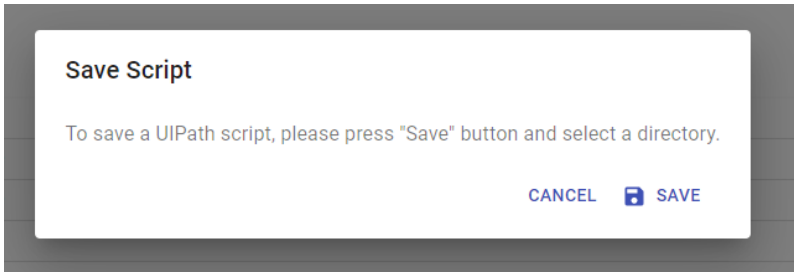
7) You can check the discovered routines by expanding them



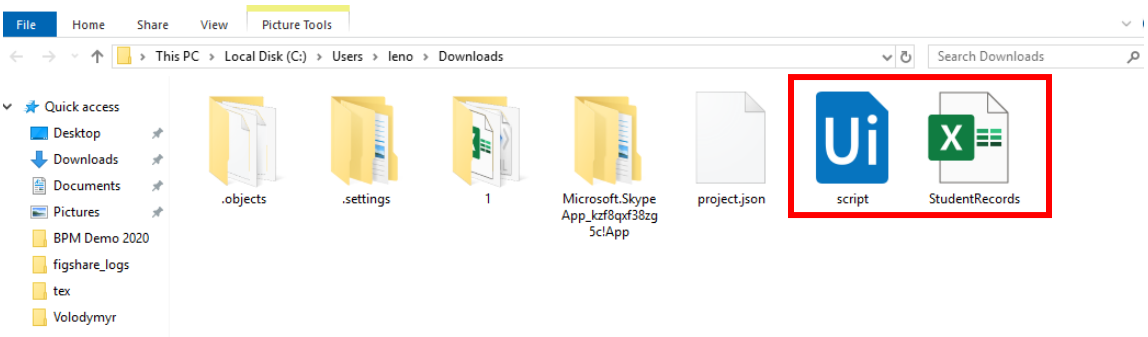
8) Select the routine to be automated by clicking the corresponding radio button and click the button *Generate Script.*



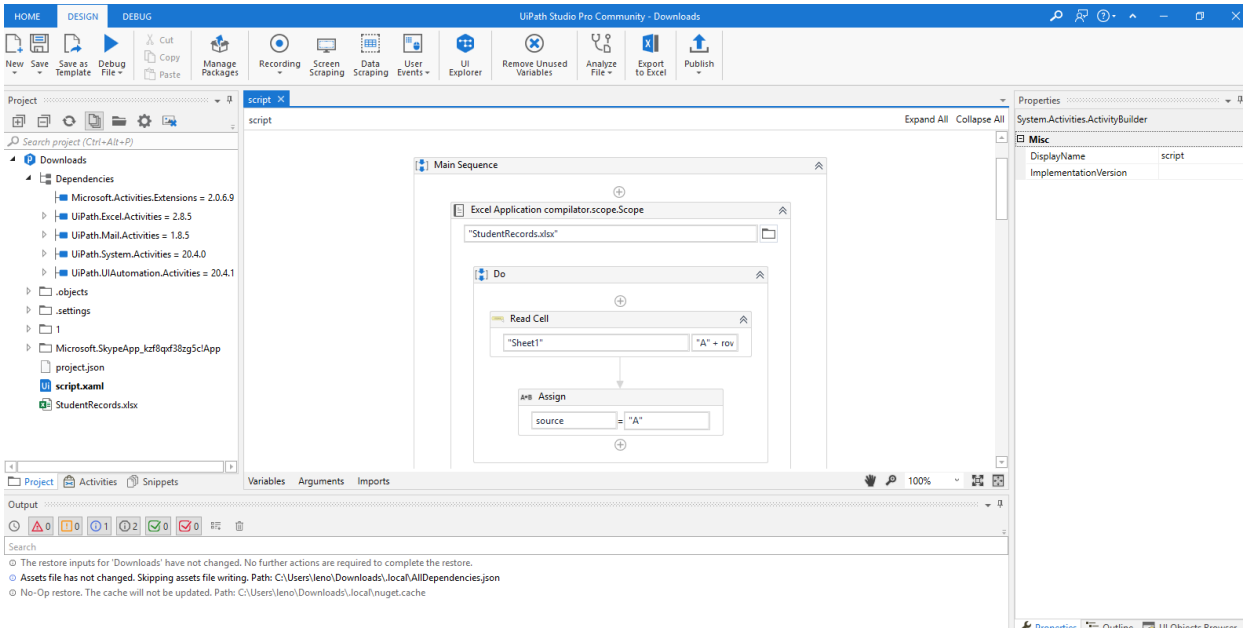
9) After the script was generated, a notification will pop up with the option to save the script on your machine. Click button *Save*



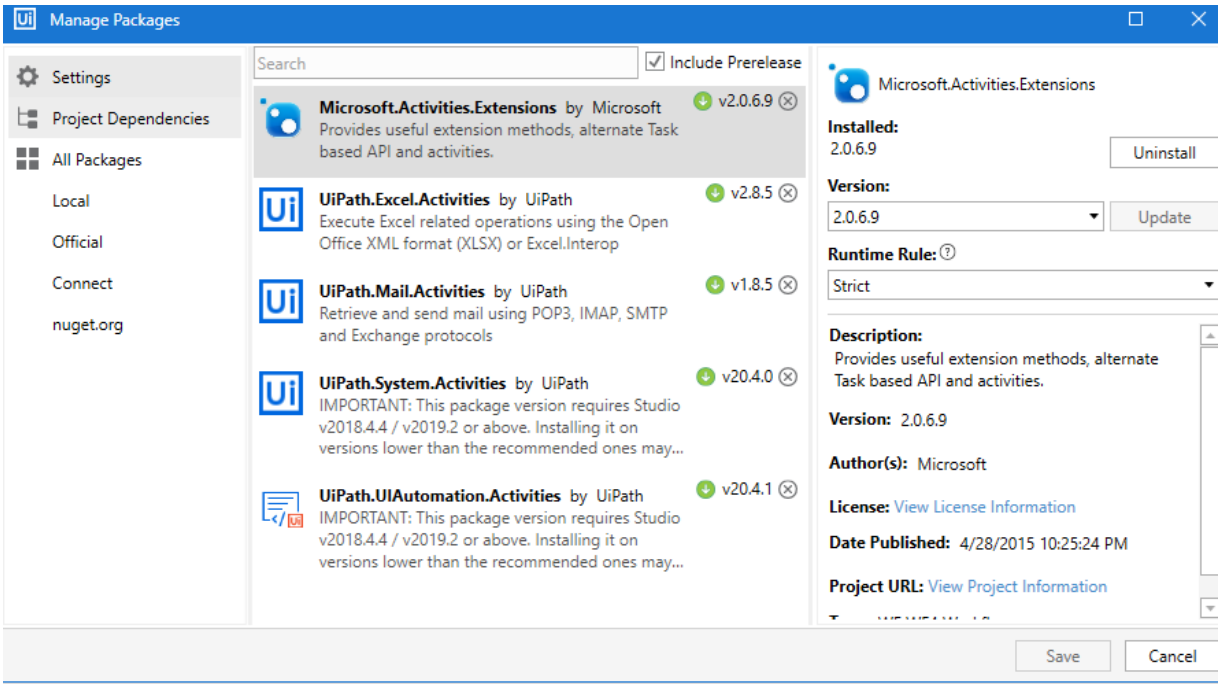
10) If the automated routine works with a spreadsheet, place the generated script and the corresponding spreadsheet in the same directory.



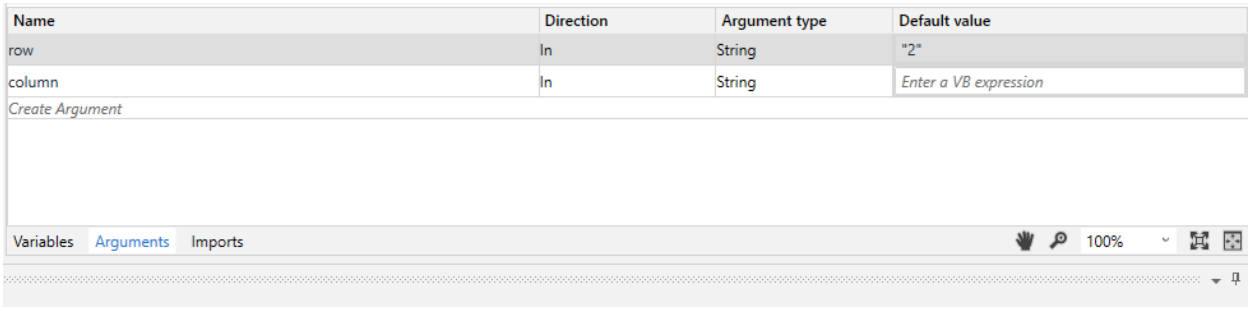
11) Open the script using UIPath client



12) Select Manage Packages and install Microft.Activities.Extensions



13) Set the input parameter for the script. In our example, it will be a row of a spreadsheet, that corresponds to a particular student entry



14) Run the script by clicking the *Debug File* button