



eYRC 2021-22: Agri Bot (AB)

Command: rosrn

`rosrn` allows you to run an executable in an arbitrary package from anywhere without having to give its full path or `cd/roscd` there first.

Usage:

```
rosrn <package> <executable>
```



`<package>` is nothing but the package name which you have created using `catkin_create_pkg` command or used any other package.

`<executable>` is the python or cpp file.

To create an executable python file

After creating a package, create a folder in the package names as `scripts` folder to store all the python files in that folder.

```
cd ~/catkin_ws/src/<package>  
mkdir scripts
```



Here we can create python scripts by running this command by going into the `scripts` directory,

```
cd scripts  
touch filename.py
```



Now you can edit your python file and before running you have to make it executable by running this command once,

```
cd ~/catkin_ws/src/<package>/scripts  
chmod +x filename.py
```



To create an executable cpp file

After creating a package, create a folder in the package names as `src` folder to store all the cpp files in that folder.

```
cd ~/catkin_ws/src/<package>  
mkdir src
```



Here we can create cpp files by running this command by going into the `src` directory,

```
cd src  
touch filename.cpp
```



Now you can edit your cpp file , but for making it executable we have to edit the `CMakeLists.txt` file which is present in the package.

Add these few lines at the bottom of `CMakeLists.txt` file,

```
add_executable(filename src/filename.cpp)  
target_link_libraries(filename ${catkin_LIBRARIES})
```



Then run this command,

```
cd ~/catkin_ws  
catkin build
```

