Debugging

`PowerToys Run` is a single exe file associated with `launcher.exe` process and debugger should be attached to this process. There are two approaches to debug `PowerToys Run`. Both these approaches differ in the compile-time and the range of functionalities that could be debugged. These methods are discussed in detail in the following sections.

Debugging Prerequisite

Setup development environment for PowerToys by following instruction here.

Direct debugging

This approach is used to test UI, plugins, and core `PowerToys Run` functionality. This **cannot** be used to test `PowerToys Run` settings. The approach is significantly faster compared to `Debugging with runner`, as it requires compiling projects relevant to `PowerToys Run`. Please follow the steps below for direct debugging.

1. Right-click on `modules->launcher->PowerLauncher` and select `Set as startup Project`.
2. Press `F5` to start debugging.

Debugging with runner

This approach can be used to test UI, plugins, core `PowerToys Run` functionality and `PowerToys Run` settings. This approach **cannot** be used to debug functions that execute on starting `launcher.exe` process. This requires building runner along with all the other modules on first compile, making it slower than `Direct debugging` approach. The subsequent compilations should be fast.

1. Right-click on `runner` and select `Set as startup Project`.
2. Press `F5` to start debugging.
3. Attach debugger to `launcher.exe` process.
    1. Go to `Debug->Attach to process..`
    2. Filter and select `launcher.exe` process.
    3. Click on `Attach`.