Narration&Reference Haskell installation on WSL

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Haskell installation on WSL

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Operating environment

In this video, I will show you how to install Haskell in Ubuntu on WSL (Windows Subsystem for Linux)
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Haskell is a programming language that assembles programs around functions.

For an overview and grammar of Haskell, please refer to Reference of *Narration & Reference* file.

Update for Ubuntu

First open Ubuntu on WSL.

First, type `sudo apt update` to get updated information.

Next, type `sudo apt upgrade` and update the system.

Install Haskell

First from the command line, type `cd /mnt/c` to go to the Windows C drive.

Next, type `ls` and display the contents of the C drive.

It's OK.

Next, create a directory for Haskell in a specific directory.

Here I created a directory named `Haskell` under `__myprg` directory.

Next, we are going to install *Haskell*.

Type `sudo apt install haskell-platform`.

Since installation is already finished here, it will end immediately, but it will take some time to install a new one.

Install Stack

Next we are going to install Stack.

Stack is a tool to create new Haskell projects and build them.

Type `sudo apt install haskell-stack`.

Since installation is already finished here, it will end immediately, but it will take some time to install a new one.

Configuration of Visual Studio Code

Next we are going to prepare the environment of the editor for editing Haskell's program.

Start Visual Studio Code by typing `code .` on the command line.

First, click the *Extension* icon on the left and type `Haskell` in the search box.

Then *Haskell Syntax Highlighting* will be displayed in the search result, so click *install*.

When the explanation page of *Haskell Syntax Highlighting* is displayed, click *Reload and Activate* to activate it.

Next, change the setting so that *bash* can be used in the terminal window.

Enter `control +,` to display the *Settings* page.

Then type `terminal.integrated` in the search box.

Then click on *Edit setting.json*.

Then the contents of the user setting will be displayed on the right side,

Type `"terminal.Integrated.shell.windows": "C:\\Windows\\sysnative\\bash.exe",`

Then save this file and exit the VS Code once.

Return to the command line and type `code .` to restart the VS Code.

Running the Haskell program

When the VS Code opens, use the `control + BackApostrophe` key to open the terminal window.

You can see that *bash* is enabled.

Next, create a simple Haskell program and check startup.

With VS Code, create a new file called `hello.hs`,

And type `main = putStrLn "Hello, World!"`

Save this file.

Then in the terminal window,

Type `ghc hello.hs -o hello03`

ghc is a compiler and *hello03* is the name of the executable file generated by compilation.

We are going to execute this file.

Type `./hello03`.

You will find `Hello, World!`.

It is OK.

Next, execute haskell file without specifying an output file.

Type `runghc hello.hs`.

`Hello, World!` has been output.

It is OK.

We were able to confirm the installation of Haskell.

Thank you for your watching.

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