

# SOLIDITY TUTORIAL I

## pragma

```
pragma solidity ^0.4.0

contract SimpleStorage {
    // to be defined
}
```

# INTRODUCTION

- The Solidity documentation is used as input for this video tutorial and is not intended to replace the Solidity documentation.
- When reading the Solidity documentation you sometimes need additional information or code examples for a better understanding of the subject. This tutorial will hopefully provide you with these answers.
- This tutorial uses the online Remix IDE to compile and debug the Solidity smart contracts without having to install any software on your computer. An up-to-date online version is accessible at <https://remix.ethereum.org>.
- All my Solidity tutorials and presentations can be found at: [http://www.mobilefish.com/developer/blockchain/blockchain\\_quickguide\\_solidity\\_tutorial.html](http://www.mobilefish.com/developer/blockchain/blockchain_quickguide_solidity_tutorial.html)

# PRAGMA

- The pragma directive for example:

```
pragma solidity ^0.4.0;
```

specifies which solidity compiler version to be used when processing its input.

- The pragma directive works on solidity version 0.4.0 and up.
- More complex rules can be used when specifying the compiler version.  
The expression follows those used by <https://docs.npmjs.com/misc/semver>

# PRAGMA

- The solidity contract used in this video can be found at:  
<https://goo.gl/TrwKEk>
- Use the latest Firefox or Chrome browser version when accessing this URL.

# PRAGMA

- **pragma solidity ^0.4.0;**  
match the versions  $\geq 0.4.0$  and  $< 0.5.0$
- **pragma solidity  $\geq 0.4.5$ ;**  
match the versions 0.4.5, 0.4.6, 0.5.1, 1.0.0 but not the versions 0.4.4 or 0.3.0.
- **pragma solidity 0.4.0 || 0.4.3 - 0.4.5;**  
match the versions 0.4.0, 0.4.3, 0.4.4, 0.4.5 but not the versions 0.4.1 or 0.4.6.
- **pragma solidity  $> 0.4.3$   $\leq 0.4.6$ ;**  
match the versions 0.4.4, 0.4.5, 0.4.6 but not the versions 0.4.3 or 0.4.7.

# PRAGMA

- **pragma solidity 0.4.\*;**  
match the versions  $\geq 0.4.0$  and  $< 0.5.0$
- **pragma solidity ~0.4.2;**  
match the versions  $\geq 0.4.2$  and  $< 0.(4+1).0$