

1. Dependency Injection is a technique where one object supplies the dependencies of another object. The reason why it is important is because it promotes flexibility and pluggability within code. A simple analogy for this is like when creating a lamp and soldering the plug to an outlet, and the next time we need to rip the thing out, its is going to be difficult. So for example, a class named 'User' needs to connect to the database  
Hard coded this way

```
class User
{
    private $database = null;

    public function __construct() {
        $this->database = new database('host', 'user', 'pass', 'dbname');
    }

    public function getUsers() {
        return $this->database->getAll('users');
    }
}

$user = new User();
$user->getUsers();
```

We improve it become this:

```
class User
{
    private $database = null;

    public function __construct(Database $database) {
        $this->database = $database;
    }

    public function getUsers() {
        return $this->database->getAll('users');
    }
}

$database = new Database('host', 'user', 'pass', 'dbname');
$user = new User($database);
$user->getUsers();
```