

PHP Question 2.3

Without altering the given code:

- Represent a universal remote that can turn on a television and a cable box.
- Represent a remote-control user who can push the `power on` button of a remote control.
- Have a remote-control user push the `power on` button of a tv remote.
- Have the same remote-control user push the `power on` button of a universal remote.

```
<?php

interface RemoteControl {
    public function powerOn();
}

class Television {
    public function setPower($state) {
        // Truncated Code
    }
}

class CableBox {
    public function setPower($state) {
        // Truncated Code
    }
}

class TVRemote implements RemoteControl
{
    private $tv;

    public function __construct(Television $tv) {
        $this->tv = $tv;
    }

    public function powerOn() {
        $this->tv->setPower(true);
    }
}
```

PHP Answer 2.3

(Provide your answer below. Use as much space as necessary.)

1.

```
class UniversalRemote extends TVRemote
{
    private $cableBox;

    public function __construct(CableBox $cableBox) {
        parent::__construct(new Television());
        parent::powerOn();
        $this->cableBox = $cableBox;
    }

    public function powerOn() {
        $this->cableBox->setPower(true);
    }
}
```

2.

```
class User extends TVRemote
{
    public function __construct() {
        $this->tv = new Television();
        parent::__construct($this->tv);
    }

    public function powerOnButton() {
        $this->powerOn();
    }
}
```

3.

```
65         $this->powerOn();
66     }
67 }
68
69 $user = new User();
70 $user->powerOnButton();
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

We're in Matrix.

4.

```
class User extends TVRemote
{
    public function __construct() {
        $this->tv = new Television();
        parent::__construct($this->tv);
    }

    public function powerOnButton() {
        $this->powerOn();
    }

    public function powerOnUniversalButton(UniversalRemote $universalRemote) {
        $universalRemote->powerOn();
    }
}
```

```
76  
77 $user = new User();  
78 $cableBox = new CableBox();  
79 $user->powerOnUniversalButton(new UniversalRemote($cableBox));|
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

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