

Instructions

Manage a game player's High Score list.

Your task is to build a high-score component of the classic Frogger game, one of the highest selling and addictive games of all time, and a classic of the arcade era. Your task is to write methods that return the highest score from the list, the last added score and the three highest scores.

Solution

```
class HighScores {

    HighScores() {
        throw new UnsupportedOperationException('method not implemented.')
    }
}

import spock.lang.*

class HighScoresSpec extends Specification {

    def "List of scores"() {
        expect:
        new HighScores(scores).scores == expected

        where:
```

```
scores      || expected

[30, 50, 20, 70] || [30, 50, 20, 70]

}

@Ignore

def "Latest score"() {

    expect:

    new HighScores(scores).latest() == expected

    where:

    scores      || expected

    [100, 0, 90, 30] || 30

}

@Ignore

def "Personal best"() {

    expect:

    new HighScores(scores).personalBest() == expected

    where:

    scores      || expected

    [40, 100, 70] || 100

}
```

@Ignore

```
def "Top 3 scores"() {
```

expect:

```
new HighScores(scores).personalTopThree() == expected
```

where:

scores	expected
--------	----------

[10, 30, 90, 30, 100, 20, 10, 0, 30, 40, 40, 70, 70] || [100, 90, 70]

}

@Ignore

```
def "Personal top highest to lowest"() {
```

expect:

```
new HighScores(scores).personalTopThree() == expected
```

where:

scores || expected

$[20, 10, 30] \parallel [30, 20, 10]$

}

@Ignore

```
def "Personal top when there is a tie"() {
```

expect:

new HighScores(scores).personalTopThree() == expected

where:

scores || expected

[40, 20, 40, 30] || [40, 40, 30]

}

@Ignore

def "Personal top when there are less than 3"() {

expect:

new HighScores(scores).personalTopThree() == expected

where:

scores || expected

[30, 70] || [70, 30]

}

@Ignore

def "Personal top when there is only one"() {

expect:

new HighScores(scores).personalTopThree() == expected

```

    where:

    scores || expected

    [40] || [40]
  }

  @Ignore
  def "Personal top three does not mutate"() {

    given:

    def hs = new HighScores(scores)

    def top3 = hs.personalTopThree()

    expect:

    hs.latest() == expected

    where:

    scores      || expected

    [40, 20, 10, 30] || 30
  }
}

```