**TASK-1.0**

**Please read the source code below and try to understand what it does.**

**public** **static** DateTimeZone forOffsetHoursMinutes(**int** hoursOffset, **int** minutesOffset) **throws** IllegalArgumentException {

**if** (hoursOffset < -23 || hoursOffset > 23) {

**throw** **new** IllegalArgumentException("Hours out of range: " + hoursOffset);

}

**if** (minutesOffset < 0 || minutesOffset > 59) {

**throw** **new** IllegalArgumentException("Minutes out of range: " + minutesOffset);

}

**try** {

offset = FieldUtils.safeMultiply(minutesOffset);

} **catch** (ArithmeticException ex) {

**throw** **new** IllegalArgumentException("Offset is too large");

}

**return** *forOffsetMillis*(offset);

}

**Q.1.0. How well do you think you understand the code?**

* Well
* Not so well

**TASK-1.1**

However, this same code is failing.

**Failure Message:**

java.lang.IllegalArgumentException: Minutes out of range: -15

**Test:**

assertEquals(DateTimeZone.forID("-02:15"),

DateTimeZone.forOffsetHoursMinutes(-2, -15));

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We will ask you **four different** questions about the **same code** with the **same failure** above.

**Q.1.1. Do you think that something in the highlighted code causes the failure?**

* Yes
* No

**public** **static** DateTimeZone forOffsetHoursMinutes(**int** hoursOffset, **int** minutesOffset) **throws** IllegalArgumentException {

**if** (hoursOffset < -23 || hoursOffset > 23) {

**throw** **new** IllegalArgumentException("Hours out of range: " + hoursOffset);

}

**if** (minutesOffset < 0 || minutesOffset > 59) {

**throw** **new** IllegalArgumentException("Minutes out of range: " + minutesOffset);

}

**try** {

offset = FieldUtils.safeMultiply(minutesOffset);

} **catch** (ArithmeticException ex) {

**throw** **new** IllegalArgumentException("Offset is too large");

}

**return** *forOffsetMillis*(offset);

}

**Q.1.2. How confident are you that your answer is correct?**

* Confident
* Not so confident

**TASK-1.2**

**Failure Message:**

java.lang.IllegalArgumentException: Minutes out of range: -15

**Test:**

assertEquals(DateTimeZone.forID("-02:15"),

DateTimeZone.forOffsetHoursMinutes(-2, -15));

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**Q.1.3. Do you think that something in the highlighted code causes the failure?**

* Yes
* No

**public** **static** DateTimeZone forOffsetHoursMinutes(**int** hoursOffset, **int** minutesOffset) **throws** IllegalArgumentException {

**if** (hoursOffset < -23 || hoursOffset > 23) {

**throw** **new** IllegalArgumentException("Hours out of range: " + hoursOffset);

}

**if** (minutesOffset < 0 || minutesOffset > 59) {

**throw** **new** IllegalArgumentException("Minutes out of range: " + minutesOffset);

}

**try** {

offset = FieldUtils.safeMultiply(minutesOffset);

} **catch** (ArithmeticException ex) {

**throw** **new** IllegalArgumentException("Offset is too large");

}

**return** *forOffsetMillis*(offset);

}

**Q.1.4. How confident are you that your answer is correct?**

* Confident
* Not so confident