import java.util.\*

fun partitionTo() = TODO()

fun partitionWordsAndLines() {

val (words, lines) = listOf("a", "a b", "c", "d e")

.partitionTo(ArrayList(), ArrayList()) { s -> !s.contains(" ") }

check(words == listOf("a", "c"))

check(lines == listOf("a b", "d e"))

}

fun partitionLettersAndOtherSymbols() {

val (letters, other) = setOf('a', '%', 'r', '}')

.partitionTo(HashSet(), HashSet()) { c -> c in 'a'..'z' || c in 'A'..'Z' }

check(letters == setOf('a', 'r'))

check(other == setOf('%', '}'))

}

fun <T, C : MutableCollection<T>> Collection<T>.partitionTo(first: C, second: C, predicate: (T) -> Boolean): Pair<C, C> {

for (element in this) {

if (predicate(element)) {

first.add(element)

} else {

second.add(element)

}

}

return Pair(first, second)

}