```swift
func compute_moon_phase_conway(date:Date) -> Int {
    let calendar = Calendar.autoupdatingCurrent
    let components = calendar.dateComponents([.year, .month, .day], from: date)
    let year = components.year
    let month = components.month
    let day = components.day
    var r = year! % 100;
    r %= 19;
    if (r>9){ r -= 19;}
    r = ((r * 11) % 30) + month! + day!;
    if (month!<3){r += 2;}
    let x = ((year! < 2000) ? Double(r) - 4 : Double(r) - 8.3);
    r = Int(floor(x + 0.5)) % 30;
    return (r < 0) ? r+30 : r;
}
var mNames:[String] = [
"hilo",
"hoaka",
"kukahi",
"kulua",
"kukolu",
"kupau",
"olekukahi",
"olekulua",
"olekukolu",
"olepau",
"huna",
"mohalu",
"hua",
"akua",
"hoku",
"mahealani",
"kulu",
"la'aukukahi",
"la'aukulua",
"la'aupau",
"olekukahi",
"olekulua",
"olepau",
"kaloakukahi",
"kaloakulua",
"kaloapau",
"kane",
"lono",
"mauli",
"muku" ]

var pAdvice:[String] = [
"excellent day to plant all varieties of plants except for bananas. This hawaiian
"new moon" phase starts the lunar calendar sequence",
```

"today is promising day for planting many varieties of plants, especially 'uala and tuber-type plants",
    "plant sweet potatoes. Will be firm and upright ku. Will also produce one shoot. Plant upright plants such as trees. ",
    "excellent day to plant 'uala, kalo, mai'a, and trees. Huli planted is believed to produce two shoots; ku lua means to stand in pairs",
    "huli or slips planted today with produce three shoots; kukolu means to stand in threes",
    "final evening that 'uala and kalo can be planted and expected to grow upright and firm ku.",
    "unproductive for planting. Cultivate, prune, and hill up sweet potatoes. Plants will remain pruned back longer.",
    "most challenging day, moon rises at noon, moon's shape appears to be split in half. Planting is unproductive. Prune and mulch today",
    "mulching, weeding, and pruning the best farming activities today. Still considered an unproductive day",
    "good day for planting 'ulu, eggplant, string beans, squash, melon and many other vegetables. Cultivate and prune back other plants",
    "plant gourds, sweet potatoes, pumpkins, corn. Sharp tips of moon huna or hide today",
    "excellent planting for anything but trees. Flowers planted will be especially beautiful. Secrets will be revealed today",
    "plant anything that bears fruit (hua). Bananas planted have small fruit. The moon will be in an egg shaped appearance tonight. Known to be fertile night for many things.",
    "plant sweet potatoes, taro, gourds, bananas, corn. Akua are out and about this evening. Therefore night activity was discouraged.",
    "excellent for planting all kinds of plants but taro and bananas will be abundant with small fruit or corms. Seeds will become animated by the full moon. ",
    "plant bananas in the evening, will grow plentiful and large. Plant taro, gourds, yams, flowers. Everything is animated by the moon. ",
    "plant bananas. Excellent night to plant potatoes and melon. Not a good night to build a house, put up a roof or a fence because kulu means to fall. ",
    "plant bananas, but no sweet potatoes. Gather medicinal plants.",
    "good for cultivating, but not planting. Gather la'au for medicinal use",
    "good day to plant anything but vine-type plants. Medicine was prepared and administered by the kahuna la'au lapa'au",
    "not a good day for planting. Cultivate and irrigate other plants. Pruned plants remain cut back longer.",
    "not a good day for planting. Pruned plants remain cut back longer",
    "plant bananas. Cultivate other plants",
    "good day for planting long or tall type plants such as bamboo, sugar cane, string beans, eggplants, mamake, wauke, wapine and others",
    "good for planting anything but potatoes, melon or bananas.", "plant bamboo, sugar cane",
    "excellent day to plant anything. In the old days this night was reserved for ceremony and ritual and no farming or fishing occurred",
    "excellent day for planting any type of plant especially those that provide food",
    "excellent day for all styles of planting any variety of plant.",
    "bananas planted this evening will bear a stalk one muku in length, which is approximately 4 feet long. Do not plant taro or sweet potatoes"]