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#Junior-Patolli

def finder(y, z, x):
    while (z != y):
        if y in x:
            f=x.index(y)
            return f, y
        y += 1
    return -1, y

def patolli(i, position, oppo):
    primes=[2,3,5,7,11,13,17,19,23,29,31,37,41,43,47,53]
    squares=[9,16,25,36,49]
    positionindexes = [6,11,16,21,26,34,39,44,49]
    spot = position + int(i)

    if spot == 52:
        return (52)
    elif spot in oppo or spot > 52:
        return position
    elif spot in primes:
        pre = spot
        for j in oppo:
            for p in range(spot, spot + 7):
                if j == p:
                    return j - 1
            if position == pre - int(i):
                return p
    elif spot in squares:
        pre = spot
        for j in oppo:
            for p in range(spot, spot - 7, -1):
                if j == p:
                    return j + 1
            if position == pre - int(i):
                return p
    elif spot not in primes and spot not in squares and position >= 3:
        positionindex,checkposition = finder(position, spot, positionindexes)
        if (positionindex != -1) and (spot >= (checkposition + 2)):
            while (spot != position):
                if spot % int(i) == 0 and spot not in oppo:
                    return spot
                spot -= 1
        return position
    else:
        return spot

for line in (open("Patollitxt", "r")):
    x=line.strip().split(" ")
    oppo=x[:3]
    position=int(x[3])
    roll=x[5:]
    for i in range(0,len(oppo)):
        oppo[i]=int(oppo[i])

    for i in roll:
        position=patolli(i,position,oppo)
    if position == 52:
        print("GAME OVER")
    else:
        print(position)