for l in range(5):
    list_ay = ["4318672 4","35197545 1","975318642 9","9876543210 5","314159265358 10"] #make sure there is 1 space(s) between N and P
    thing = list_ay[l].replace(" "," ").split(" ",") #splits into P and N
    p = int(thing[-1]) #saves p value
    del thing[-1] #deletes p
    thing = thing[0] #saves N to string
    thing1 = thing.replace(" "," ").split(" ",") # makes new list where it splits this string. All places of nothing get a comma between them, and then list is formed where these commas are
    thing1.pop(0) #pops empty index at beginning
    del thing1[-1] #pops empty index at end
    pdigit = thing1[len(thing1)-p] #finds what number is the pth digit from the right
    location = len(thing1)-p #finds the index of the pth digit
    i = 0
    while i<int(location): #adds this pth digit to all values left of this aforementioned pth digit
        thing1[i] = int(thing1[i])+int(pdigit)
        i+=1
    while i>int(location) and i<len(thing1): #finds absolute difference between each value right of pth digit and the pth digit itself
        thing1[i] = abs(int(thing1[i])-int(pdigit))
        i+=1
    for z in range(len(thing1)):
        if int(thing1[z])>9:
            thing1[z] = int(thing1[z])%10
    for c in range(len(thing1)):
        print(thing1[c], end="")
    print("") #makes it so the other outputs are not on same line