"DNA"

print()

print("Hello, this program is called DNA.")

print()

print("Let me introduce you to Alice, Bob, Charlie, Daisy, Eddie, ")

print("Frank, Glen, Harry and Iona.")

print()

print("These 9 people have been specially chosen because the ")

print("nucleotides in their DNA run to a specific pattern and can be ")

print("predicted by counting the Short Tandom Repeats (STR) in a ")

print("portion of DNA called genome.")

print()

print("Can you identify the person based on their max number of STR?")

print()

n = 0

#for n in range (15):

name = ["Alice", "Bob", "Charlie", "Daisy", "Eddie", "Frank", "Glen", "Harry", "Iona"]

a0 = {"name":"Alice", "AAGC":7, "AGTC":14, "ATAG":2, "aa":"a0"}

a1 = {"name":"Bob", "AAGC":14, "AGTC":2, "ATAG":7, "aa":"a1"}

a2 = {"name":"Charlie", "AAGC":5, "AGTC":10, "ATAG":15, "aa":"a2"}

a3 = {"name":"Daisy", "AAGC":9, "AGTC":12, "ATAG":6, "aa":"a3"}

a4 = {"name":"Eddie", "AAGC":6, "AGTC":9, "ATAG":12, "aa":"a4"}

a5 = {"name":"Frank", "AAGC":10, "AGTC":15, "ATAG":5, "aa":"a5"}

a6 = {"name":"Glen", "AAGC":2, "AGTC":7, "ATAG":14, "aa":"a6"}

a7 = {"name":"Harry", "AAGC":15, "AGTC":5, "ATAG":10, "aa":"a7"}

a8 = {"name":"Iona", "AAGC":12, "AGTC":6, "ATAG":9, "aa":"a8"}

print (a0["name"], a0["AAGC"],",", a0["AGTC"],",",a0["ATAG"])

print (a1["name"], a1["AAGC"],",", a1["AGTC"],",",a1["ATAG"])

print (a2["name"], a2["AAGC"],",", a2["AGTC"],",",a2["ATAG"])

print (a3["name"], a3["AAGC"],",", a3["AGTC"],",",a3["ATAG"])

print (a4["name"], a4["AAGC"],",", a4["AGTC"],",",a4["ATAG"])

print (a5["name"], a5["AAGC"],",", a5["AGTC"],",",a5["ATAG"])

print (a6["name"], a6["AAGC"],",", a6["AGTC"],",",a6["ATAG"])

print (a7["name"], a7["AAGC"],",", a7["AGTC"],",",a7["ATAG"])

print (a8["name"], a8["AAGC"],",", a8["AGTC"],",",a8["ATAG"])

#identity = ([a0] or [a1] or [a2] or [a3] or [a4] or [a5] or [a6] or [a7] or [a8])

aa = {"zero":a0, "one":a1, "two":a2, "three":a3, "four":a4, "five":a5, "six":a6, "seven":a7, "eight":a8}

#keys = ["name", "AAGC", "AGTC", "ATAG", "identity"]

#dict = { name.capitalise():{key:[]for key in keys} for name in identity}

#i ==identity

b = 0

c = 0

d = 0

e = 0

f = 0

print()

print ("Max AAGC:", end = " ")

c = input()

print()

print(c)

print()

d = 0

print("Max AGTC:", end = " ")

d = input()

print()

print(d)

print()

print("Max ATAG:", end = " ")

e = input()

print()

print(e)

print()

print("Checking our records...")

print("Press return to find out the results:")

b = input()

print()

print ("-------------------------------------------------------------")

print ()

f = (c,d,e)

#print (f)

if f == ("7","14","2"):

print ("The person you identified is Alice.")

elif f == ("14","2","7"):

print ("The person you identified is Bob.")

elif f == ("5","10","15"):

print ("The person you identified is Charlie.")

elif f == ("9","12","6"):

print ("The person you identified is Daisy.")

elif f == ("6","9","12"):

print ("The person you identified is Eddie.")

elif f == ("10","15","5"):

print ("The person you identified is Frank.")

elif f == ("2","7","14"):

print ("The person you identified is Glen.")

elif f == ("15","5","10"):

print ("The person you identified is Harry.")

elif f == ("12","6","9"):

print ("The person you identified is Iona.")

else:

print ("No match.")

print ()

print ("---------------------------------------------------------------")