1. Write a Python program to check if the given number is a Disarium Number?

n=input("enter a number : ")

p=len(n)

n=t=int(n)

s=0

while t>0:

s+=(t%10)\*\*p

p-=1

t=int(t/10)

if s==n:

print("Disarium Number")

else:

print("not a Disarium Number")

1. Write a Python program to print all disarium numbers between 1 to 100?

for n in range(1,101):

p=len(str(n))

t=n

s=0

while t>0:

s+=(t%10)\*\*p

p-=1

t=int(t/10)

if s==n:

print(n,", ",end="")

1. Write a Python program to check if the given number is Happy Number?

n=int(input("enter a number : "))

while True:

t=n

s=0

while t>0:

s+=(t%10)\*\*2

t=int(t/10)

if len(str(s))==1:

if s==1:

print("Happy Number")

break

else:

print("not a happy Number")

break

else:

n=s

1. Write a Python program to print all happy numbers between 1 and 100?

for n in range(1,101):

t=n

while True:

s=0

while t>0:

s+=(t%10)\*\*2

t=int(t/10)

if len(str(s))==1:

if s==1:

print(n,", ",end="")

break

else:

break

else:

t=s

1. Write a Python program to determine whether the given number is a Harshad Number?

n=int(input("enter a number : "))

t=n

s=0

while t>0:

s+=(t%10)

t=int(t/10)

if n%s==0:

print("Harshad Number")

else:

print("not a Harshad Number")

1. Write a Python program to print all pronic numbers between 1 and 100?

for n in range(1,101):

t=n

s=0

while t>0:

s+=(t%10)

t=int(t/10)

if n%s==0:

print(n,", ",end="")