1.

n=int(input())

sum=n\*(n+1)\*(2\*n+1)/6

print(sum)

2.

j=0

for n in range(1,1000):

if n%2!=0 and n%3!=0:

print(n,end=' ')

j+=1

if j%20 == 0:

print('\n')

3.

n=1

while n\*(n+1)\*(2\*n+1)/6<1000:

n+=1

print(n)

4.

m=int(input('請輸入列數(m)?'))

n=int(input('請輸入行數(n)?'))

x=input('請輸入要顯示的字元?')

for i in range(m):

for j in range(n):

print(x, end = "")

print()

5.

import random

def lotto(n,m):

list=random.sample(range(1,n+1),m)

return list

6.

from exlotto import lotto

n=int(input())

m=int(input())

value=lotto(n,m)

value.sort()

print(value)

7.

class Shape:

def \_\_init\_\_(self):

self.name='形狀'

def length(self):

pass

class Tri(Shape):

def \_\_init\_\_(self,name,length1,length2,length3):

self.name=name

self.length1=length1

self.length2=length2

self.length3=length3

def length(self):

return self.length1+self.length2+self.length3

s=Shape()

t=Tri('三角形',3,4,5)

print(s.name)

print(t.name,'周長為'+str(t.length()))

8.

import math

class Shape:

def \_\_init\_\_(self):

self.name='形狀'

def length(self):

pass

class Tri(Shape):

def \_\_init\_\_(self,name,length1,length2,length3):

self.name=name

self.length1=length1

self.length2=length2

self.length3=length3

def length(self):

return self.length1+self.length2+self.length3

class Rec(Shape):

def \_\_init\_\_(self,name,length4,length5):

self.name=name

self.length4=length4

self.length5=length5

def length(self):

return (self.length4+self.length5)\*2

class Cir(Shape):

def \_\_init\_\_(self,name,r):

self.name=name

self.r=r

def length(self):

return round(2\*math.pi\*self.r,1)

s=Shape()

t=Tri('三角形',3,4,5)

r=Rec('長方形',4,5)

c=Cir('圓形',5)

print(s.name)

print(t.name,'周長為'+str(t.length()))

print(r.name,'周長為'+str(r.length()))

print(c.name,'周長為'+str(c.length()))