

№2

```
print('x y z w')
```

```
k=0,1
```

```
for x in k:
```

```
    for y in k:
```

```
        for z in k:
```

```
            for w in k:
```

```
                if (not(y<=(x==w)) and (z<=x))==1:
```

```
                    print(x,y,z,w)
```

```
or n in range(1,77):
```

```
    r=bin(n)[2:]
```

```
    r+=str(r.count('1')%2)
```

```
    r+=str(r.count('1')%2)
```

```
    if int(r,2)>77:
```

```
        print(n)
```

```
        break
```

```
for i in range(1000,1,-1):
```

```
    s = i
```

```
    s = s // 10
```

```
    n = 1
```

```
    while s < 51:
```

```
        s = s + 5
```

```
        n = n * 2
```

```
    if n==64:
```

```
        print(i)
```

```
        break
```

```
8 from itertools import product
```

```
p = product('EJIMPY',repeat=4)
```

```
n = 0
```

```
for x in p:
```

```
    if (x[0] != 'J'):
```

```
        n += 1
```

```
    else:
```

```
        n+=1
```

```
        break
```

```
print(n)
```

```
12 s=70*'8'
```

```
while '2222' in s or '8888' in s:
```

```
if '2222' in s:
    s=s.replace('2222','88',1)
else:
    s=s.replace('8888','22',1)
print(s)
```

интересно: >>> 78>>2

Вариант1

```
x=3*4*38+2*423+420+3*45+2*4*4+1
k0=0
while x:
    if x%16==0:
        k0+=1
    x//=16
print(k0)
```

Вариант2

```
x=3*4*38+2*423+420+3*45+2*4*4+1
s=""
while x:
    s=str(x%16)+s
    x//=16
print(s.count('0'))
print(s)
```

Вариант3

```
x=3*4*38+2*423+420+3*45+2*4*4+1
a=[]
while x:
    a.append(x%16)
    x//=16
print(a.count(0))
```

Вариант4

```
=3*4*38+2*423+420+3*45+2*4*4+1
print(hex(x)[2:].count('0'))
```

```

print('19 задача')
def f(x,p):
    if x>=29 or p>2:
        return p==2
    elif p%2==0:
        return f(x+1,p+1)and f(x*2,p+1)
    else:
        return f(x+1,p+1)or f(x*2,p+1)

for s in range(1,28+1):
    if f(s,0):
        print(s)

```

```

print('20 задача')
def f(x,p):
    if x>=29 or p>3:
        return p==3
    elif p%2==1:
        return f(x+1,p+1)and f(x*2,p+1)
    else:
        return f(x+1,p+1)or f(x*2,p+1)

for s in range(1,28+1):
    if f(s,0):
        print(s)

```

```

print('21 задача')
def f(x,p):
    if x>=29 or p>4:
        return (p==2 or p==4)
    elif p%2==0:
        return f(x+1,p+1)and f(x*2,p+1)
    else:
        return f(x+1,p+1)or f(x*2,p+1)
for s in range(1,28+1):
    if f(s,0):
        print(s)
print('_____')
def f(x,p):
    if x>=29 or p>2:
        return (p==2)
    elif p%2==0:
        return f(x+1,p+1)and f(x*2,p+1)
    else:
        return f(x+1,p+1)or f(x*2,p+1)
for s in range(1,28+1):
    if f(s,0):
        print(s)

```

```
for i in range(10000,1,-1):
```

```
    x = i
```

```
    Q = 9
```

```
    L = 0
```

```
    while x >= Q:
```

```
        L = L + 1
```

```
        x = x - Q
```

```
    M = x
```

```
    if M < L:
```

```
        M = L
```

```
        L = x
```

```
    if L==4 and M==5:
```

```
        print(i)
```

```
        break
```

```

f=open('17.txt')
k=0
maxs=0

a=int(f.readline())
for line in range(4999):
    s=0
    b=int(f.readline())
    if a%3==0 or b%3==0:
        k+=1
        s=a+b
        maxs=max(s,maxs)
    a=b
print(k,maxs)

```

```

f=open('17.txt')
k=0
maxs=0

a=[]
for line in f:
    a.append(int(line))

for i in range (len(a)-1):
    s=0
    if a[i]%3==0 or a[i+1]%3==0:
        k+=1
        s=a[i]+a[i+1]
        maxs=max(s,maxs)
print(k, maxs)

```

ЕСЛИ(ОСТАТ(F1;3)=0;ПРОСМОТР(F1/3;\$B\$1:\$AJ\$1;\$B\$2:\$AJ\$2);0)

```
f=open('24.txt')
s=f.readline()
#s=f.read().strip()

m,tlen=0,1
for i in range(1,len(s)):
    if s[i]!='P'and s[i-1]!='P' or\
       s[i]=='P' and s[i-1]!='P' or\
       s[i]!='P'and s[i-1]=='P':
        tlen+=1
        m=max(m,tlen)
    else:
        tlen=1
print(m)
```

```
count = 0
for n in range(7000000+1, 100000000):
    M = 0
    sq = int(n**0.5)
    for d in range(2, sq+1):
        if n % d == 0:
            M+=d
            M+=n//d
            break

    if M > 0 and M % 10 == 8:
        count += 1
        print(n, M)
    if count == 5:
        break
```

```
def f(x,t,l):  
    if x==t and l==6:  
        return 1  
    elif x>t:  
        return False  
    else:  
        return f(x+1,t,l+1) +f(x+2,t,l+1) +f(x*2,t,l+1)  
print(f(1,20,0))
```

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```
def f(x,t,l):
    if x==t:
        return l
    elif x%2==0 and (x-2>t or x-1>t):
        return f(x//2,t,l+1)
    elif x-2>=t:
        return f(x-2,t,l+1)
    else:
        return f(x-1,t,l+1)
```

```
print(f(28,1,0))
m=f(28,1,0)
```

```
def k(x,t,l):
    if x==t and l==m:
        return 1
    elif x>t:
        return False
    else:
        return k(x+1,t,l+1)+k(x+2,t,l+1)+k(x*2,t,l+1)
print(k(1,28,0))
```

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