

Рег.Номер: 5703

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Баллы: 67

Вариант№: 4

Задание1 (3/3 баллов)

```
var
    h,m,n,dm,ds:longint;
begin
    read(h,m,n,dm,ds);
    n:=n-1;
    m:=m+dm*n+(ds*n) div 60;
    h:=h+m div 60;
    m:=m mod 60;
    h:=h mod 24;
    write(h, ' ',m);
end.
```

Задание2 (0/10 баллов)

```
var
    a,b,n:longint;

begin
    read(a,b);
    n:=b-a;
    ans:=(n+1) div 2;
    writeln(ans+1);
```

end.

Задание3 (12/15 баллов)

var

a,b,i,t,max:integer;

function count1(x:integer):integer;

var

s:byte;

begin

s:=0;

while x>0 do

begin

s:=s+x and 1;

x:=x shr 1;

end;

count1:=s;

end;

function res(x:integer):integer;

begin

res:=0;

if count1(x) mod 2=1 then

begin

x:=(x shl 1) mod (1 shl 8);

x:=x+(count1(x)+1) mod 2;

res:=x;

```
        end;
end;

begin
    read(a,b);
    max:=0;
    for i:=a to b do
        begin
            t:=res(i);
            if max<t then
                max:=t;
            end;
        write(max);
    end.
end.
```

Задание4 (3/15 баллов)

```
var
    n,i,s,t:longint;

begin
    read(n);
    s:=0;
    t:=3;
    for i:=1 to n do
        begin
            s:=s+t;
            t:=t+i*2;
```

```
    end;  
    writeln(s);  
end.
```

Задание5 (19/27 баллов)

```
type  
    wrd=array of byte;  
var  
    a,endarr:wrd;  
    s:string;  
    n,k,j,i,max,ans:longint;  
  
procedure next(var arr:wrd);  
var  
    i:integer;  
begin  
    inc(arr[n]);  
    for i:=n downto 2 do  
        if arr[i]=max then  
            begin  
                arr[i]:=0;  
                inc(arr[i-1]);  
            end;  
        if arr[1]>max-1 then  
            arr[1]:=max-1;  
        end;  
  
procedure proverka(arr:wrd);
```

```

var
    i:integer;
    sort:array[0..4] of byte;
    t:boolean;
begin
    t:=true;
    for i:=1 to max do
        sort[i-1]:=0;
    for i:=1 to n do
        inc(sort[arr[i]]);
    for i:=1 to max do
        if sort[i-1]<>k then
            begin
                t:=false;
                break;
            end;
        if t then
            inc(ans);
    end;

function can(arr:wrk):boolean;
var
    i,j:integer;
begin
    can:=false;
    for i:=1 to max do
        for j:=1 to k do
            if arr[(i-1)*k+j]<>max-i then
                begin
                    can:=true;

```

```

        exit;
    end;
end;

begin
    read(s);
    for i:=1 to length(s) do
        if s[i]=' ' then
            begin
                max:=i-1;
                val(copy(s,i+1,length(s)-i),k,j);
                break;
            end;

        n:=max*k;
        setlength(a,n+1);
        setlength(endarr,n+1);
        for i:=1 to n do
            a[i]:=0;
            a[0]:=0;
            ans:=0;

            while can(a) do
                begin
                    next(a);
                    proverka(a);
                end;
            write(ans,' ',ans*n);
        end.
    end.

```

Задание6 (30/30 баллов)

```
type
    parol=array[1..10] of byte;
var
    a:parol; //0=A 1=O 2=Г 3=Щ 4=Ь
    alph:array[0..4] of char = ('A','O','Г','Щ','Ь');
    n,i:byte;
    k:longint;

procedure next(var arr:parol);
var
    i:byte;
begin
    inc(arr[n]);
    for i:=n downto 2 do
        if arr[i]=5 then
            begin
                arr[i]:=0;
                arr[i-1]:=arr[i-1]+1;
            end;
        if arr[1]>4 then arr[1]:=4;
    end;

procedure proverka(arr:parol);
var
    kg,ks,i:byte;
begin
```

```

kg:=0;
ks:=0;
i:=1;
while (i<=n) and (kg<=ks) do
begin
    if arr[i]<2 then
        inc(kg);
    if arr[i]>2 then
        inc(ks);
    i:=i+1;
end;
if (i=n+1) and (kg<=ks) then
k:=k+1;
end;

```

```

function sum(arr:parol):boolean;
var
    i,s:byte;
begin
    s:=0;
    sum:=true;
    for i:=1 to n do
        s:=s+arr[i];
        if s=n*4 then
            sum:=false;
end;

```

```

begin
    read(n);
    k:=1;

```



```
for i:=1 to n do
a[i]:=0;
while sum(a) do
begin
    proverka(a);
    next(a);
end;
write(k);
end.
```