```
//BAI 1: TAXI
const
   fin='test.inp';   fon='test.out';
   maxm=1000;vc=100;
var
   d:array[1..4] of longint;
   n:word;
procedure enter;
var i,x:word;
begin
readln(n);
for i:=1 to n do
   begin
   read(x);
   inc(d[x]);
   end;
end;
procedure solve;
var s:word;
begin
s:=0;
s:=d[4];
s:=s+d[3];
d[1]:=d[1]-d[3];
s:=s+(d[2] div 2);
if d[2] mod 2 = 1 then
   begin
   inc(s);
   d[1]:=d[1]-2;
   end;
if d[1]>0 then s:=s+((d[1]-1) div 4)+1;
write(s);
end;
begin
assign(input,fin);reset(input);
assign(output,fon);rewrite(output);
enter;
solve;
close(input);close(output);
end.
```

```
//BAI 2: MASO
const
   fin='test.inp';fon='test.out';
var
   a:array[1..7] of longint;
   c:array[1..11] of char;
   n,k:longint;
procedure nhap;
var i:longint;
begin
read(k);
read(n);
for i:=1 to 7 do read(a[i]);
readln;
for i:=1 to k do read(c[i]);
end;
procedure xuli;
var s,i:longint;
begin
s:=0;
for i:=7 downto 1 do
   begin
   s:=s+a[i]*(n mod 10);
   n:=n div 10;
   end;
s:=s mod k;
writeln(c[s+1]);
end;
begin
assign(input,fin);reset(input);
assign(output,fon);rewrite(output);
nhap;
xuli;
close(input);close(output);
end.

//BAI 3: XEDIEN
const
   fin='';   fon='';
procedure solve;
var i,n,a,b,s,max:longint;
```

```
begin
readln(n);max:=0;s:=0;
for i:=1 to n do
   begin
   read(a, b);
   s:=s-a+b;
   if s>max then max:=s;
   end;
write(max);
end;
begin
assign(input,fin);reset(input);
assign(output,fon);rewrite(output);
solve;
close(input);close(output);
end.

//BAI 4: TICHMAX
const finp='tichmax.inp';
      fout='tichmax.out';
var max1,max2,max3,min1,min2,x,i,n:longint;
    max,a, b:int64;
begin
     {Nhap}
assign(fi,finp);reset(fi);
readln(fi,n);
for i:=1 to n do read(fi,a[i]);
Close(fi);
     {Tim max}
     max1:=a[1];max2:=max1;max3:=max1;
     for i:=2 to n do
begin
          if (x>=max1) then
                    begin
               max3:=max2;
               max2:=max1;
               max1:=x;
                    end
        else
if (x>=max2) then
                         begin
```

```
                    max3:=max2;
                    max2:=x;
                        end
else
if (x>=max3) then max3:=x;
            end;
{Tim min}
for i:=2 to n do
      begin
            if (x<=min1) then
                  begin
            min2:=min1;
            min1:=x;
                  end
else
if (x<=min2) then min2:=x;
    end;
a : = max1*max2*max3 ;
b := min1*min2*max1 ;
if a>b then max:=a else max:=b;
       {Xuat}
       assign(fo,fout);rewrite(fo);
    writeln(kq);
    close(fo);
end.

//BAI 5: LOHONG
Program Bt;
Const
lohong:array[0..9] of longint = (1,0,0,0,1,0,1,0,2,1);
Var
tong,n:longint;
Begin
Write('Nhap n: ');
Readln(n);
Write(n,' ');
Tong:=0;
While n>0 do
       Begin
       tong:=tong+lohong[n mod 10];
       n:=n div 10;
```

```
        End;
Write(tong);
Readln;
End.

//BAI 6:BAICONGONNHAT
const
   fin = 'test.inp';
   fon = 'test.out';
   maxN = 100;maxM=100;
var
   a:array[0..maxm,0..maxn] of char;
   j,i,m,n,d:longint;
begin
assign(input,fin);reset(input);
assign(output,fon);rewrite(output);
readln(m, n);
for i:=1 to m do
   begin
   for j:=1 to n do
      begin
      read(a[i,j]);
      if a[i,j]='#' then
         begin
         inc(d);
         if a[i-1,j]='#' then dec(d);
         if a[i,j-1]='#' then dec(d);
         end;
      end;
   readln;
   end;
writeln(d);
close(input);close(output);
end.

//BAI7:  NGONNGU
const
   fin='test.inp';   fon='test.out';
   maxmn=1000;maxn=1000;
   vc=maxlongint;
```

```
var
   cs:array[0..9] of string;
   n,d:longint;
procedure nhap;
var i:Longint;s:string; c:char;
begin
d:=-1;s:='';
while not eoln do
   begin
   read(c);
   if c<>' ' then s:=s+c
   else
      begin inc(d);cs[d]:=s;s:=''; end;
   end;
end;
function doccs(x:longint):string;
var max:string;
begin
max:=cs[x mod 10];
while x>0 do
   begin
   if cs[x mod 10]>max then max:=cs[x mod 10];
   x:=x div 10;
   end;
exit(max);
end;
procedure xuli;
var s,i,x:longint;
begin
read(n);
for i:=1 to n do
   begin
   read(x);
   writeln(doccs(x));
   end;
end;

begin
assign(input,fin);reset(input);
assign(output,fon);rewrite(output);
nhap;
```

```
xuli;
close(input);close(output);
end.

//BAI 8: CHUSON
const
   fin='tongcs.inp';   fon='tongcs.out';
   maxmn=1000;maxn=1000;
   vc=maxlongint;

var
   a:array[0..10] of qword;


function so(vt:qword):char;
var x,y,du,kq,i:longint;skq:string;
begin
x:=1;
while a[x]<=vt do
   x:=x+1;
du:=vt-a[x-1]-1;
y:= du div x;
kq:=1;
for i:=1 to x-1 do kq:=kq*10;
kq:=kq+y;
str(kq,skq);
exit(skq[du mod x+1]);
end;
procedure xuli;
var s,lt:int64;i:Longint;n:qword;
begin
read(n);
s:=0;lt:=1;
for i:=1 to 10 do
   begin
   s:=s+i*9*lt;
   a[i]:=s;
   lt:=lt*10;
   end;
//for i:=1 to 10 do writeln(a[i]);
writeln(so(n));
```

```
end;
begin
assign(input,fin);reset(input);
assign(output,fon);rewrite(output);
//nhap;
xuli;
close(input);close(output);
end.
```