UVA 13148

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   long long int n;
   while(1){
   scanf("%lld",&n);
   if(n==0)
      break;

   else if(n==1 || n==64 || n==729 ||
n==4096 ||
      n==15625 || n==46656 || n==117649 ||
n==262144 ||
      n==531441 || n==1000000 ||
n==1771561 || n==2985984 ||
      n==4826809 || n==7529536 ||
n==11390625 || n==16777216 ||
      n==24137569 || n==34012224 ||
n==47045881 || n==64000000  ||
n==85766121){
       printf("Special\n");
      }
      else
       printf("Ordinary\n");

   }
   return 0;
}
```

```
;UVA_13148
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
  A DW 1
  B DW 64
  C DW 729
  D DW 4096
.CODE
MAIN PROC
   CALL SCAN_NUM
   PRINTN

   CMP A,CX
   JE PRINTIF
   CMP B,CX
   JE PRINTIF
   CMP C,CX
   JE PRINTIF

   CMP D,CX
   JE PRINTIF

   CALL PTHIS
   DB 'Ordinary',0
   JMP EXIT

   PRINTIF:
   CALL PTHIS
   DB 'Special',0
   PRINTN
   JMP EXIT

   JMP EXIT
   PRINTELSE:
   CALL PTHIS
   DB 'Ordinary',0
   JMP EXIT

   EXIT:
   MOV AH,4CH
   INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS
DEFINE_PTHIS
END MAIN
```

UVA 13025

```
#include<stdio.h>
int main()
{
printf("May 29, 2013 Wednesday\n");

return 0;
}
```

```
;UVA_13025
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA

   PRINTF DB "May 29, 2013 Wednesday$"

.CODE
MAIN PROC
   MOV AH,9
   LEA DX,PRINTF
   INT 21H
   PRINTN


MAIN ENDP
MOV AH,4CH
INT 21H
END MAIN
```

UVA 13012

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
   int n,m,i,sum=0;
   while(scanf("%d",&n)!=EOF)
   {
      sum=0;
      for(i=0;i<5; i++)
      {
         scanf("%d", &m);
         if(m==n)
            sum++;
      }
      printf("%d\n", sum);
   }
   return 0;
}
```

```
;UVA_13012
.MODEL SMALL
.STACK 100H
.DATA

   N DW ?
   M DW ?
   SUM DW 0
   I DW 0
   F DW 5D
.CODE
   MAIN PROC
      MOV AX,@DATA
      MOV DS,AX


      CALL SCAN_NUM
      MOV BX,CX     ;n input
      PRINTN
      JMP SCAN:

      SCAN:
      CMP I,5D      ;loop for scanning
      JGE EXIT_SCAN  ;5 numbers

      CALL SCAN_NUM
      PRINTN
      INC I         ;m==n
      CMP BX,CX
      JE INC_SUM
      JMP SCAN

      EXIT_SCAN:
      CALL PRINT_NUM_UNS
      JMP EXIT

      INC_SUM:
      INC SUM
      MOV AX,SUM
      JMP SCAN

EXIT:
      MAIN ENDP

   DEFINE_SCAN_NUM
   DEFINE_PRINT_NUM_UNS
   END MAIN
```

UVA 12646

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int a,b,c;
while(scanf("%d %d %d",&a,&b,&c)==3)
{
   if(a==b && b==c){
      printf("*\n");

   }
   if(b==c && a!=b && a!=c){
      printf("A\n");
   }
   if(a==c && b!=a && b!=c){
      printf("B\n");
   }
   if(a==b && c!=b && c!=a){
      printf("C\n");
   }
}
   return 0;
}
```

```
;UVA_12646
.MODEL SMALL
.STACK 100H
.DATA
    A DW 0
    B DW 0
    C DW 0
.CODE
MAIN PROC
   WHILE:
   CALL SCAN_NUM
   MOV A,CX
   PRINTN
   CALL SCAN_NUM
   MOV B,CX
   PRINTN
   CALL SCAN_NUM
   MOV C,CX
   PRINTN

   MOV BX,B     ;check b == c
   CMP BX,C
   JE AB
   JNE CA1

   AB:
   MOV BX,A     ;check a==b
   CMP BX,B
   JE EXIT

   CA1:
   MOV BX,A
   CMP BX,B     ;compare a and b
   JNE AB1
   JNE BA1
   JE CW
   JMP EXIT

   AB1:
   MOV BX,A
   CMP BX,C     ;compare a and c
   JNE AW
   JE BA1
   JMP EXIT

   BA1:
```

```
MOV BX,B
CMP BX,C     ;compare b and c
JNE BW
JE CW
JMP EXIT

AW:
MOV AX,A
CALL PRINT_NUM_UNS
JMP EXIT

BW:
MOV AX,B
CALL PRINT_NUM_UNS
JMP EXIT

CW:
MOV AX,C
CALL PRINT_NUM_UNS
JMP EXIT
EXIT:
  MAIN ENDP

DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

UVA_12531

```
#include <stdio.h>
#include <stdlib.h>

int main()
{

   int n;
   while(scanf("%d",&n)==1){

   if(n%6==0)
      printf("Y\n");

   else
      printf("N\n");
   }
   return 0;


}
```

```
 ;UVA_12531
.MODEL SMALL
.STACK 100H
.DATA
   VAR DB 6

.CODE

MAIN PROC
    CALL SCAN_NUM
    PRINTN
    MOV AX,CX

    MOV CX,6
    DIV CX
    CMP DL,0
    JE IF
    JMP ELSE

    IF:
    CALL PTHIS
    DB 'Y',0
    JMP EXIT

    ELSE:
    CALL PTHIS
    DB 'N',0
    JMP EXIT
EXIT:
      MAIN ENDP

   DEFINE_SCAN_NUM
   DEFINE_PRINT_NUM_UNS
   DEFINE_PTHIS
   END MAIN
```

UVA_12478

```c
#include <stdio.h>
#include <stdlib.h>

int main()
{
   printf("KABIR\n");
   return 0;
}
```

```
;UVA_12478

ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   MSG DB "KABIR$"
.CODE
   MOV AH,9
   LEA DX,MSG
   INT 21H
   PRINTN

EXIT:
   MOV AH,4CH
   INT 21H
END MAIN
```

ORG 100H

;UVA 12468

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int m,a,b,t=0,p=0;

   while(scanf("%d %d",&a,&b)==2){
         if(a==-1 && b==-1)break;
   m=(a<b)? (b-a):(a-b);

   if(m<50)
      printf("%d\n",m);
   else if(m>=50)
   {
     if(a<b){
      a=a+100;
      m=a-b;
      printf("%d\n",m);
      }
     else if(a>b){
      b=b+100;
      m=b-a;
      printf("%d\n",m);
      }
   }
   }
   return 0;
}
```

```
.MODEL SMALL
.STACK 100H
.DATA
.CODE
MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX        ;scan 2 numbers
   PRINTN
   CALL SCAN_NUM

   CMP CX,AX
   JG IF
   JLE ELSE
   JMP EXIT

   IF:
   SUB CX,AX
   CMP CX,5
   JG MINUS
   JLE PRINT
   JMP EXIT

   ELSE:
   SUB AX,CX
   MOV CX,AX
   CMP CX,5
   JG MINUS
   JLE PRINT
   JMP EXIT

   MINUS:
   MOV BX,10
   SUB BX,CX
   JMP PRINT
   JMP EXIT

   PRINT:
   PRINTN
   CALL PRINT_NUM_UNS

 EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS
END MAIN
```

;UVA_12372

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int l,h,w,t,i;

   scanf("%d",&t);
   for(i=1;i<=t;i++){
   scanf("%d %d %d",&l,&w,&h);

   if(l<=20 && h<=20 && w<=20)
      printf("Case %d: good\n",i);

   else
      printf("Case %d: bad\n",i);
   }
   return 0;
}
```

```
 ;UVA_12372
.MODEL SMALL
.STACK 100H
.DATA
.CODE
MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX
   PRINTN
   CALL SCAN_NUM
   MOV BX,CX
   PRINTN
   CALL SCAN_NUM
   PRINTN

   CMP AX,20
   JLE OK
   JMP BAD

   OK:
   CMP BX,20
   JLE OKK
   JMP BAD

   OKK:
   CMP CX,20
   JLE GOOD
   JMP BAD

   GOOD:
   CALL PTHIS
   DB 'GOOD',0
   JMP EXIT

   BAD:
   CALL PTHIS
   DB 'BAD',0
   JMP EXIT


EXIT:
      MAIN ENDP

   DEFINE_SCAN_NUM
   DEFINE_PRINT_NUM_UNS
   DEFINE_PTHIS
   END MAIN
```

UVA_12149

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int N,sum,i;
while(1){
   scanf("%d",&N);
   if(N==0)
      break;
      sum=0;
   for(i=1;i<=N;i++){

      sum+=(i*i);
   }
   printf("%d\n",sum);

}
   return 0;
}
```

```
;UVA_12149
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   SUM DW 0
   I DW 0
.CODE
MAIN PROC
   CALL SCAN_NUM
   PRINTN

   START:
   INC I
   MOV BX,I
   MOV AX,I
   CMP I,CX       ;for(i=1;i<=N;i++)
   JLE FOR
   JMP PRINT

   FOR:
   MUL BX         ;sum+=(i*i)
   ADD SUM,AX
   JMP START

   PRINT:
   MOV AX,SUM
   CALL PRINT_NUM_UNS
   JMP EXIT

    EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

;11936

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int a,b,c,t,i,j;
   scanf("%d",&t);
   for(i=1;i<=t;i++){
   scanf("%d %d %d",&a,&b,&c);

   if(a+b<=c)
      printf("Wrong!!\n");
   else if(b+c<=a)
      printf("Wrong!!\n");
   else if(c+a<=b)
      printf("Wrong!!\n");
   else
      printf("OK\n");
}
   return 0;
}
```

```
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   A DW 0
   B DW 0
   C DW 0
.CODE

MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX
   PRINTN
   CALL SCAN_NUM
   MOV BX,CX
   PRINTN
   CALL SCAN_NUM
   PRINTN

   IF:
   ADD AX,BX
   CMP AX,CX
   JLE WRONG
   JMP ELSE

   ELSE:
   ADD BX,CX
   CMP BX,AX
   JLE WRONG
   JMP ELSEIF

   ELSEIF:
   ADD CX,AX
   CMP CX,BX
   JLE WRONG
   JMP OK

   WRONG:
   CALL PTHIS
   DB 'WRONG!!',0
   JMP EXIT

   OK:
   CALL PTHIS
   DB 'OK',0

    EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS
DEFINE_PTHIS

END MAIN
```

;UVA_11877

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
   int a,b,i,sum=0;

   while(scanf("%d",&a)!=0){
   if(a==0)
   break;
   b=a/2;

   printf("%d\n",b);
}
   return 0;
}
```

```
;UVA_11877
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   A DB 2
.CODE
MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX
   DIV A          ;b=a/2
   MOV AH,0
   PRINTN
   CALL PRINT_NUM_UNS

    EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

```
      MOV AX,@DATA
```

;UVA_11805

```
#include<stdio.h>
int main()
{
   int N,i,n,K,P,t;
   scanf("%d",&t);
   for(i=1;i<=t;i++){
   scanf("%d %d %d",&N,&K,&P);
   n=K+P;
   while(n>N){
      n=n-N;
   }
   printf("Case %d: %d\n",i,n);
   }
return 0;
}
```

```
;UVA_11805
.MODEL SMALL
.STACK 100H
.DATA

   N DW ?
   I DW ?
   N_LOWER DW ?
   K DW 0
   P DW ?
   T DW ?



.CODE

   MAIN PROC
      MOV DS,AX

      CALL SCAN_NUM
      MOV N,CX       ;scan N
      PRINTN

      CALL SCAN_NUM   ;scan K
      MOV K,CX
      PRINTN

      CALL SCAN_NUM   ;scan P
      MOV P,CX
      PRINTN

      MOV CX,K
      MOV BX,P       ;n=K+P
      ADD CX,BX
      MOV N_LOWER,CX


      WHILE_LOOP:    ;while(n>N)

      MOV CX,N_LOWER
      CMP CX,N
      JNG EXIT_WHILE_LOOP

      SUB CX,N       ;n=n-N
      MOV N_LOWER,CX

      JMP WHILE_LOOP

      EXIT_WHILE_LOOP:
      PRINTN
      MOV AX,N_LOWER
      CALL PRINT_NUM_UNS


EXIT:
      MAIN ENDP

   DEFINE_SCAN_NUM
   DEFINE_PRINT_NUM_UNS

   END MAIN
```

UVA-11727

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int a,b,c,i,j=1;
   scanf("%d\n",&i);
   for(;j<=i;j++){

   scanf("%d %d %d",&a,&b,&c);
   if(a>b && a<c || a<b && a>c)
      printf("Case %d: %d\n",j,a);
   else if(b>a && b<c || b<a && b>c)
      printf("Case %d: %d\n",j,b);
    else if(c>a && c<b || c<a && c>b)
      printf("Case %d: %d\n",j,c);
   }
   return 0;
}
```

```
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
.CODE

MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX
   PRINTN
   CALL SCAN_NUM
   MOV BX,CX
   PRINTN
   CALL SCAN_NUM
   PRINTN
   CMP AX,BX
   JL AXANS
   JMP BXANS

   AXANS:
   CMP AX,CX
   JG AXISANS
   JMP AXCHECK
   JMP EXIT

   AXCHECK:
   MOV AX,BX
   CALL PRINT_NUM_UNS
   JMP EXIT

   BXANS:
   CMP AX,CX
   JL BXISANS
   JMP CXANS

   CXANS:
   MOV AX,CX
   CALL PRINT_NUM_UNS
   JMP EXIT

   BXISANS2:
   CALL PRINT_NUM_UNS
   JMP EXIT

   AXISANS:
   CALL PRINT_NUM_UNS
   JMP EXIT

   BXISANS:
   CALL PRINT_NUM_UNS
   JMP EXIT

EXIT:
MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN



;11498
```

;11498

```
#include <stdio.h>
#include <stdlib.h>

int main()
{

   int a,b,x,y,t,i;
   while(scanf("%d",&t)==1){
      if(t==0)break;
   scanf("%d %d",&x,&y);

   for(i=1;i<=t;i++){
   scanf("%d %d",&a,&b);
   if(a==x || b==y)
      printf("divisa\n");
   else if(a>x && b>y)
      printf("NE\n");
   else if(a<x && b>y)
      printf("NO\n");
   else if(a<x && b<y)
      printf("SO\n");
   else if(a>x && b<y)
      printf("SE\n");

   }
}
   return 0;
}
```

```
.MODEL SMALL
.STACK 100H
.DATA

   N DW ?
   I DW ?

.CODE
MAIN PROC
    CALL SCAN_NUM
    PRINTN
    MOV AX,CX      ;x in AX
    CALL SCAN_NUM
    PRINTN         ;y in BX
    MOV BX,CX
    PRINTN
    CALL SCAN_NUM
    PRINTN
    MOV DX,CX      ;a in DX
    CALL SCAN_NUM   ;b in CX
    PRINTN

    LEVEL1:
    CMP DX,AX
    JNE ELSE1
    CMP BX,CX
    JE  DIVISA

    DIVISA:
    CALL PTHIS
    DB 'DIVISA',0
    JMP EXIT

    ELSE1:
    CMP DX,AX
    JL ELSE2
    CMP BX,CX
    JG NE

    NE:
    CALL PTHIS
    DB 'NE',0
    JMP EXIT

    ELSE2:       ;a<x already here
    CMP BX,CX
    JG NO
    JMP ELSE3
```

```
    NO:
    CMP BX,CX     ;a>x already here
    JL SE
    CALL PTHIS
    DB 'NO',0
    JMP EXIT

    SE:
    CALL PTHIS
    DB 'SE',0
    JMP EXIT

    ELSE3:
    CALL PTHIS
    DB 'SO',0
    JMP EXIT

EXIT:
      MAIN ENDP
   DEFINE_SCAN_NUM
   DEFINE_PRINT_NUM_UNS
   DEFINE_PTHIS

   END MAIN
```

UVA_11388

```
#include <stdio.h>
#include <stdlib.h>

int main()
{   int a,b,t,i;
   scanf("%d",&t);
   for(i=1;i<=t;i++){
   scanf("%d %d",&a,&b);

   if(b%a==0){
      printf("%d %d\n",a,b);
   }
   else
      printf("-1\n");
   }
   return 0;
}
```

```
;UVA_11388
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   ;VAR DW '-1'
.CODE
MAIN PROC
   MOV BX,0
   CALL SCAN_NUM
   MOV BX,CX      ;scanf("%d %d",&a,&b)
   PRINTN
   CALL SCAN_NUM
   MOV AX,CX
   PRINTN

   DIV BL
   CMP AH,0
   JE IF
   JMP ELSE

   IF:
   MOV AX,BX
   CALL PRINT_NUM_UNS
   PRINTN
   MOV AX,CX
   CALL PRINT_NUM_UNS
   JMP EXIT

   ELSE:
   CALL PTHIS
   DB '-1',0


 EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS
DEFINE_PTHIS

END MAIN
```

;UVA-11172

```
#include <stdio.h>
#include <stdlib.h>

int main()
{   int a=1,b,c,t;
   scanf("%d",&a);
   for(t=1;t<=a;t++){
      scanf("%d %d",&c, &b);
      if(c<b)
         printf("<\n");
      else if(c>b)
         printf(">\n");
      else
         printf("=\n");
   }

   return 0;
}
```

```
;UVA-11172
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
.CODE

MAIN PROC
   CALL SCAN_NUM    ;scan a number in CX
   MOV AX,CX
   PRINTN           ;new line
   CALL SCAN_NUM    ;scan another number
   PRINTN           ;new line

   CMP AX,CX
   JE EQUAL

   CMP AX,CX
   JL LESS

   CMP AX,CX
   JG MORE


   EQUAL:
   CALL PTHIS
   DB '=',0
   JMP EXIT

   LESS:
   CALL PTHIS
   DB '<',0
   JMP EXIT

   MORE:
   CALL PTHIS
   DB '>',0
   JMP EXIT

EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS
DEFINE_PTHIS
END MAIN
```

;UVA_11150

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
   int a,b,i,sum=0;

   while(scanf("%d",&a)!=EOF){

   b=a/2;

   sum=a+b;

   printf("%d\n",sum);
}
   return 0;
}
```

```
;UVA_11150
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   A DB 2
.CODE
MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX
   DIV A
   ADD AX,CX
   PRINTN
   CALL PRINT_NUM_UNS

    EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

;UVA_11044

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int m,n,t,i,l;
   scanf("%d",&t);
   for(i=1;i<=t;i++){

   scanf("%d %d",&n,&m);
   l=(n/3)*(m/3);
   printf("%d\n",l);
   }
   return 0;
}
```

```
;UVA_11044
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   A DW 3
.CODE
MAIN PROC
   CALL SCAN_NUM
   MOV AX,CX
   DIV A          ;n/3
   MOV BX,AX
   PRINTN
   CALL SCAN_NUM
   MOV AX,CX      ;m/3
   DIV A
   PRINTN
   MUL BX         ;(n/3)*(m/3)
   CALL PRINT_NUM_UNS
   JMP EXIT

    EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

;UVA_10970

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int m,n,i,j;

   while(scanf("%d %d",&n,&m)!=EOF){

   i=(m*n)-1;

   printf("%d\n",i);
   }
   return 0;
}
```

```
;UVA_10970
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
.CODE
MAIN PROC
   CALL SCAN_NUM     ;scan n
   MOV AX,CX
   PRINTN
   CALL SCAN_NUM     ;scan m
   MUL CX
   SUB AX,1          ;i=(m*n)-1
   PRINTN
   CALL PRINT_NUM_UNS

    EXIT:
     MOV AH,4CH
     INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

;10323

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int a,b,t,i,sum=1;
   while(scanf("%d",&a)!=EOF){
         sum=1;
   for(i=a;i>0;i--){
      sum*=i;
   }
   if(a>20)
      printf("Overflow!\n");

   if(a<8)
      printf("Underflow!\n");

   if(a>=8 && a<=20)
   printf("%d\n",sum);
   }
   return 0;
}
```

```
;10323
.MODEL SMALL
.STACK 100H
.CODE

MAIN PROC

   XOR BX,BX
   XOR CX,CX       ; flash the memory
   MOV CL,10       ; initialise BL to 10 to divide

INPUT:
   MOV AH,1        ; scanning function
   INT 21H
   CMP AL,13d      ; if AL == 10
   JNE NUMBER      ; if not equal thn jmp to number
   JMP FACTORIA    ; if equal thn jmp to exit

NUMBER:
   XOR DX,DX

   SUB AL,30h
   MOV DL,AL

   MOV AX,BX
   MUL CL
   ADD AX,DX
   MOV BX,AX
   JMP INPUT



FACTORIAL:
   MOV AX,BX

FIRST:            ; FACTORIAL CODE
   DEC BX
   MUL BX
   CMP BX,1
   JNE FIRST

   MOV BX,AX
```

```
EXIT:
   XOR AX,AX
   MOV AX,BX
   MOV CL,10

   MOV BX,0000H        ;initial address of allocation

STORE:
   DIV CL
   MOV [0000H+BX],AH
   ADD BX,2h
   MOV AH,0

   CMP AL,0
   JNE STORE

   MOV AH,2
   MOV DL,0Ah
   INT 21H
   MOV DL,0Dh
   INT 21H

PRINT:
   SUB BX,2h

   MOV DX,[0000h+BX]
   ADD DX,30h
   INT 21H
   CMP BX,0
   JNE PRINT


   MOV AH,4CH
   INT 21H
   MAIN ENDP
END MAIN
```

;UVA_10302

```
#include<stdio.h>
int main()
{
long  long int n;
while(scanf("%lld",&n)==1)
{
printf("%lld\n",(n*n*(n+1)*(n+1))/4);
}
return 0;
}
```

```
;UVA_10302
.MODEL SMALL
.STACK 100H
.DATA
   N DW ?
   VAR DB 4D
   NEW DW ?
.CODE
MAIN PROC
   CALL SCAN_NUM
   PRINTN
   MOV N,CX
   MOV BX,CX     ;scan n
   MOV AX,CX
   MUL N        ;in AX put n*n
   MOV NEW,AX
   ADD BX,1
   MOV AX,BX
   MUL BX
   MUL NEW
   MOV CX,4D
   DIV CX

   CALL PRINT_NUM_UNS




EXIT:
      MAIN ENDP

   DEFINE_SCAN_NUM
   DEFINE_PRINT_NUM_UNS
   DEFINE_PTHIS
   END MAIN
```

UVA 10079

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   long long int a,b,t,sum;

   while(scanf("%lld",&a)>=0){

      t=a;
      sum=0;
      for(b=a;a>0;a--){
         sum+=a;
   }
   if(t>=0)
   printf("%lld\n",sum+1);

   else
      break;

}

   return 0;
}
```

```
;UVA 10079


.MODEL SMALL
.STACK 100H
.CODE
.DATA
VAR1 DB 0

MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    MOV AH,1     ;scanf
    INT 21H
    MOV BL,AL

    MOV AH,2
    MOV DL,10
    INT 21H      ;\n
    MOV DL,13
    INT 21H

    MOV BH,'1'

TOP:

    ADD VAR1,BH   ;0+1+2+3+4.....+n

    INC BH
    CMP BH,BL
    JG PRINT


    JMP TOP

PRINT:
    SUB VAR1,95  ;
    MOV AH,2
    MOV DL,VAR1
    INT 21H
    JMP EXIT

 EXIT:
   MOV AH,4CH
   INT 21H
   MAIN ENDP
END MAIN
```

UVA_10071

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int a,t,u,v=0,s;
   while(scanf("%d %d", &u, &t)==2){

   s=2*u*t;
   printf("%d\n",s);
   }
   return 0;
}
```

```
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
   A DB 2
.CODE
MAIN PROC
   INPUT:
   CALL SCAN_NUM   ;input v
   MOV BX,CX
   PRINTN

   CALL SCAN_NUM
                ;input t
   PRINTN

   MOV AX,BX
   MUL CX
   MUL A

   CALL PRINT_NUM_UNS


   EXIT:
      MOV AH,4CH
      INT 21H
   MAIN ENDP
DEFINE_SCAN_NUM
DEFINE_PRINT_NUM_UNS

END MAIN
```

UVA 10055

```
#include <stdio.h>
#include <stdlib.h>

int main()
{

   long long int h,o,a,max,min;

   while(scanf("%lld %lld",&h,&o)==2){
   max=(h>o)?h:o;
   min=(h<o)?h:o;
   a=max-min;
   printf("%lld\n",a);
   }
   return 0;

}
```

```
.MODEL SMALL
.STACK 100H
.DATA
.CODE

MAIN PROC
   MOV AH,1
   INT 21H       ;scan first single digit
   SUB AL,48
   MOV BL,AL
   MOV AH,1
   INT 21H       ;scan second single digit
   SUB AL,48

   MOV AH,2
   MOV DL,10
   INT 21H       ;new line
   MOV DL,13
   INT 21H


   CMP BL,AL
   JG  IF
   JLE ELSE
   JMP EXIT


   IF:          ;when BL>AL
   SUB BL,AL
   MOV AH,2
   MOV DL,BL
   ADD DL,38
   INT 21H
   JMP EXIT

   ELSE:        ;when AL>BL
   SUB AL,BL
   MOV AH,2
   MOV DL,AL
   ADD DL,38
   INT 21H
   JMP EXIT

EXIT:
   MOV AH,4CH
   INT 21H
MAIN ENDP
END MAIN
```

UVA_382

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int a,b,c,i,j,t=0,sum=0;
   printf("PERFECTION OUTPUT\n");


   while(scanf("%d",&a)!=EOF){

   if(a==0){
      break;
   }

      sum=0;

   for(b=1;b<a;b++){
      if(a%b==0)
         sum+=b;
   }

   if(sum==a)
      printf("%5d  PERFECT\n",a);
   else if(sum<a)
      printf("%5d  DEFICIENT\n",a);
   else if(sum>a)
      printf("%5d  ABUNDANT\n",a);

   }
      printf("END OF OUTPUT\n");

   return 0;
}
```

```
;UVA_382
.MODEL SMALL
.STACK 100H
.DATA
   B DW 0
   VAR DB 4D
   SUM DW 0
.CODE
MAIN PROC

   CALL SCAN_NUM
   MOV AX,CX      ;scan a
   PRINTN

   FOR:
   INC B
   CMP AX,B
   JL CALCULATE   ;b<a
   JMP FINISH

   CALCULATE:
   DIV B
   CMP DL,0      ;a%b==0
   JE DSCN
   JMP FOR

   DSCN:
   MOV BX,B
   ADD SUM,BX     ;sum+=b
   JMP FOR

   FINISH:       ;get the value
   MOV AX,SUM
   CMP B,AX      ;and compare
   JNE NOTEQU
   JMP PRINT1

   PRINT1:
   CALL PTHIS
   DB 'PERFECT',0 ;sum==a
   JMP EXIT

   NOTEQU:
   CMP SUM,AX
   JL PRINT2     ;sum<a
   JMP PRINT3    ;sum>a

   PRINT2:
```

```
    CALL PTHIS
    DB 'DEFICIENT',0
    JMP EXIT

    PRINT3:
    CALL PTHIS
    DB 'ABUNDANT',0
    JMP EXIT


EXIT:
        MAIN ENDP

    DEFINE_SCAN_NUM
    DEFINE_PRINT_NUM_UNS
    DEFINE_PTHIS
    END MAIN
```

UVA_136

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   printf("The 1500'th ugly number is
859963392.\n");
   return 0;
}
```

```
;UVA_136
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA

   PRINTF DB "1500th's ugly number is 859963392.$"

.CODE
MAIN PROC
   MOV AH,9
   LEA DX,PRINTF
   INT 21H
   PRINTN


MAIN ENDP
MOV AH,4CH
INT 21H
END MAIN
```