#include <stdio.h>

const int size=50;

int push1(int ele,int stack[],int top1)

{

int i;

if(top1==size-1)

printf("stack overload");

else

{

top1++;

stack[top1]=ele;

}

return top1;

}

int pop1(int stack[],int top1)

{

int ret;

if(top1==-1)

return -1;

else

{

ret=stack[top1];

top1--;

}

return ret;

}

int push2(int ele2,int stack[],int top2)

{

int i;

if(top2==0)

printf("stack overload");

else

{

top2--;

stack[top2]=ele2;

}

return top2;

}

int pop2(int stack[],int top2)

{

int ret2;

if(top2==size)

return -1;

else

{

ret2=stack[top2];

top2++;

}

return ret2;

}

int main()

{

int stack[size],ele,ele2,top1=-1,top2=size,n,i,res1,res2,t1,t2;

scanf("%d",&n);

for(i=0;i<n;i++)

{

scanf("%d",&ele);

t1=push1(ele,stack,top1);

}

res1=pop1(stack,t1);

printf("Popped element from stack 1 is %d\n",res1);

for(i=0;i<n;i++)

{

scanf("%d",&ele2);

t1=push2(ele2,stack,top2);

}

res2=pop2(stack,t2);

printf("Popped element from stack 1 is %d",res2);

return 0;

}