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#include<stdio.h>
#include<stdlib.h>
void main()
{
int n,top1,top2,ch=1,a,i,arr[100];
printf("Enter size of array you want to use\n");
scanf("%d",&n);
top1=-1;
top2=n;
while(ch!=0)
{
printf("What do u want to do?\n");
printf("1.Push element in stack 1\n");
printf("2.Push element in stack 2\n");
printf("3.Pop element from stack 1\n");
printf("4.Pop element from stack 2\n");
printf("5.Display stack 1\n");
printf("6.Display stack 2\n");
printf("0.EXIT\n");
scanf("%d",&ch);
switch(ch)
{
case 1:
{
printf("Enter the element\n");
scanf("%d",&a);
if(top1!=(top2-1))
arr[++top1]=a;
else
printf("Overflow\n");
break;
}
case 2:
{
printf("Enter the element\n");
scanf("%d",&a);
if(top2!=(top1+1))
arr[--top2]=a;
else
printf("Overflow\n");
}
}
}

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printf("Overflow\n");
break;
}
case 3:
{
if(top1==-1)
printf("Stack1 is empty\n");
else
{
a=arr[top1--];
printf("%d\n",a);
}
break;
}
case 4:
{
if(top2==n)
printf("Stack2 is empty\n");
else
{
a=arr[top2++];
printf("%d\n",a);
}
break;
}
case 5:
{
if(top1---1)
printf("Stack1 is empty\n");
else
{
printf("Stack1 is-->>\n");
for(i=0;i<=top1;i++)
printf("%d ",arr[i]);
printf("\n");
}
break;
}
case 6:
{
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}
if(top2==n)
printf("Stack2 is empty\n");
else
{
a=arr[top2++];
printf("%d\n",a);
}
break;
}
case 5:
{
if(top1--<1)
printf("Stack1 is empty\n");
else
{
printf("Stack1 is-->>\n");
for(i=0;i<=top1;i++)
printf("%d ",arr[i]);
printf("\n");
}
break;
}
case 6:
{
if(top2--<n)
printf("Stack2 is empty\n");
else
{
printf("Stack2 is-->>\n");
for(i=(n-1);i>=top2;i--)
printf("%d ",arr[i]);
printf("\n");
}
break;
}
case 0:
break;
}
}
}

```