Logical section solutions

1)

#include<stdio.h>

int main()

{

int n,x,y;

scanf("%d",&n);

x=n/4;

y=n/2-x;

printf("%d",x\*y);

return 0;

}

2)

#include<stdio.h>

int main()

{

int n,t=1,sum=0,i;

scanf("%d",&n);

if(n==0)

printf("\n0");

// else is(n==1)

// printf("\n1");

else

{

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

{

sum=sum+t;

//printf("\n%d",sum);

t=t+8;

}

printf("\n%d",sum);

}

return 0;

}

3)

#include<stdio.h>

int main()

{

int x1,y1,x2,y2,x3,y3,x4,y4, flag=1;int x5,x6,y5,y6;

scanf("%d %d %d %d %d %d %d %d",&x1,&y1,&x2,&y2,&x3,&y3,&x4,&y4);

x5= (x1>x3)?x1:x3;y5=(y1>y3)?y1:y3;x6=(x2>x4)?x4:x2;y6=(y2>y4)?y4:y2;

if(x1>x3 || x4<x2)flag=0;if(y1>y3 || y4<y2 || (x5<x6 && y5<y6))flag=0;

if(flag==1)

printf("No Overlap");

else{

if(x1>x3 && y1 > y3 && x2>x4 && y2>y4 ){

printf("No Overlap");}

else

printf("%d %d %d %d",x5,y5,x6,y6);

}

return 0;

}

4)

#include<stdio.h>

int main()

{

int n,a[100000]={0},count=0,i,j;

scanf("%d",&n);

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

{

for(j=1; j<=n; j++)

{

if(i\*j>n)

break;

else if(a[i\*j]==0)

a[i\*j]=1;

else

a[i\*j]=0;

}

}

for(i=1; i<=n; i++)

{

if(a[i]==1)

count++;

}

printf("%d",count);

return 0;

}

5)

#include<stdio.h>

int main()

{

int n;

scanf("%d",&n);

if(n==2)

printf("YES");

else

{

if(n%2==0 || n%3==0)

printf("YES");

else

printf("NO");

}

return 0;

}

6)

#include<stdio.h>

long long a[15][3],c,d,n;

int main()

{

int i=1;

c=9ll;d=1ll;

for(;i<15;i++)

{

a[i][0]+=a[i-1][0]+c\*(long long)i;

c\*=10ll;

a[i][1]=d;

d\*=10ll;

a[i][2]=d-1ll;

}

scanf("%lld",&n);

for(i=1;i<15;i++)

{

if(a[i][0]>n)

break;

}

if((n-a[i-1][0])%(long long )i==0)

printf("%lld\n",a[i-1][2]+(n-a[i-1][0])/(long long)i);

else

printf("Impossible!\n");

return 0;

}

7)

#include<stdio.h>

int main()

{

long int m,n,m1,n1,k;

scanf("%ld %ld",&m,&n);

m1=m/2;n1=n/2;

if(m==0 || n==0)k=0;

else

k=(m1)+(n1)+1;

printf("%ld",k);

return 0;

}

8)

#include<stdio.h>

int main()

{

int i;

scanf("%d",&i);

i=2\*(i-1);

printf("%d",i);

return 0;

}