RESTORING DIVISION OF TWO NUMBERS

PROGRAM:

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| --- |
| #include<stdlib.h> |
|  | #include<stdio.h> |
|  | int acum[100]={0} ; |
|  | void add(int acum[],int b[],int n); |
|  | int q[100],b[100]; |
|  | int main() |
|  | { |
|  | int x,y; |
|  | printf("Enter the Number :"); |
|  | scanf("%d%d",&x,&y); |
|  | int i=0; |
|  | while(x>0||y>0) |
|  | { |
|  | if(x>0) |
|  | { |
|  | q[i]=x%2; |
|  | x=x/2; |
|  | } |
|  | else |
|  | { |
|  | q[i]=0; |
|  | } |
|  | if(y>0) |
|  | { |
|  | b[i]=y%2; |
|  | y=y/2; |
|  | } |
|  | else |
|  | { |
|  | b[i]=0; |
|  | } |
|  | i++; |
|  | } |
|  | int n=i; |
|  | int bc[50]; |
|  | printf("\n"); |
|  | for(i=0;i<n;i++) |
|  | { |
|  | if(b[i]==0) |
|  | { |
|  | bc[i]=1; |
|  | } |
|  | else |
|  | { |
|  | bc[i]=0; |
|  | } |
|  | } |
|  | bc[n]=1; |
|  | for(i=0;i<=n;i++) |
|  | { |
|  | if(bc[i]==0) |
|  | { |
|  | bc[i]=1; |
|  | i=n+2; |
|  | } |
|  | else |
|  | { |
|  | bc[i]=0; |
|  | } |
|  | } |
|  | int l; |
|  | b[n]=0; |
|  | int k=n; |
|  | int n1=n+n-1; |
|  | int j,mi=n-1; |
|  | for(i=n;i!=0;i--) |
|  | { |
|  | for(j=n;j>0;j--) |
|  | { |
|  | acum[j]=acum[j-1]; |
|  | } |
|  | acum[0]=q[n-1]; |
|  | for(j=n-1;j>0;j--) |
|  | { |
|  | q[j]=q[j-1]; |
|  | } |
|  | add(acum,bc,n+1); |
|  | if(acum[n]==1) |
|  | { |
|  | q[0]=0; |
|  | add(acum,b,n+1); |
|  | } |
|  | else |
|  | { |
|  | q[0]=1; |
|  | } |
|  | } |
|  | printf("\nQuoient : "); |
|  | for( l=n-1;l>=0;l--) |
|  | { |
|  | printf("%d",q[l]); |
|  | } |
|  | printf("\nRemainder : "); |
|  | for( l=n;l>=0;l--) |
|  | { |
|  | printf("%d",acum[l]); |
|  | } |
|  | return 0; |
|  | } |
|  | void add(int acum[],int bo[],int n) |
|  | { |
|  | int i=0,temp=0,sum=0; |
|  | for(i=0;i<n;i++) |
|  | { |
|  | sum=0; |
|  | sum=acum[i]+bo[i]+temp; |
|  | if(sum==0) |
|  | { |
|  | acum[i]=0; |
|  | temp=0; |
|  | } |
|  | else if (sum==2) |
|  | { |
|  | acum[i]=0; |
|  | temp=1; |
|  | } |
|  | else if(sum==1) |
|  | { |
|  | acum[i]=1; |
|  | temp=0; |
|  | } |
|  | else if(sum==3) |
|  | { |
|  | acum[i]=1; |
|  | temp=1; |
|  | } |
|  | } |
|  | } |

OUTPUT:

Enter the Number :26

4

Quoient : 00110

Remainder : 000010

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Process exited after 3.867 seconds with return value 0

Press any key to continue . . .