CRC

#include<stdio.h>

#include<conio.h>

int rem(int,int);

void main()

{

int i,j,k,dl,dil;

int data[10],div[5],newdata[15],crc[5],datacrc[15],revdata[15],remd[5];

printf("\n Enter the data length= ");

scanf("%d",&dl);

printf("\n Enter the divisor length= ");

scanf("%d",&dil);

printf("\n Enter the data : ");

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

scanf("%d",&data[i]);

printf("\n Enter the divisor : ");

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

scanf("%d",&div[i]);

printf("\n The new data is : ");

for(i=0;i<(dl+dil-1);i++)

{

if(i<dl)

newdata[i]=data[i];

else

newdata[i]=0;

printf("%d",newdata[i]);

}

for(j=0;j<=dl;j++)

{

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

{

crc[i]=newdata[i+j];

if(crc[0]==1)

newdata[i+j]=rem(newdata[i+j],div[i]);

else

newdata[i+j]=rem(newdata[i+j],0);

}

printf("\n The Crc is : ");

for(i=0;i<dil-1;i++)

printf("%d",crc[i]);

}

printf("\n The data to be send is : ");

for(i=0;i<(dl+dil-1);i++)

{

if(i<dl)

datacrc[i]=data[i];

else

datacrc[i]=crc[i-dl];

printf("%d",datacrc[i]);

}

printf("\n Enter the receiver side data : ");

for(i=0;i<(dl+dil-1);i++)

scanf("%d",&revdata[i]);

for(j=0;j<=dl;j++)

{

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

{

remd[i]=revdata[i+j];

if(remd[0]==1)

revdata[i+j]=rem(revdata[i+j],div[i]);

else

revdata[i+j]=rem(revdata[i+j],0);

}

printf("\n The reminder is : ");

k=0;

for(i=0;i<dil-1;i++)

{

printf("%d",remd[i]);

if(remd[i]==0)

k++;

}

}

if(k==dil-1)

printf("\n There is no error found.");

else

printf("\n There is error found.");

getch();

}

int rem(int x, int y)

{

if(x==y)

return 0;

else

return 1;

}

