

1. Write a function named `IsPrime`, which returns `TRUE` (nonzero) if the given is a prime-number and `FALSE` (zero) if it is not. The simplest method to find out if a given number is a prime number is to check to see if any remainder is generated from the division of the number by all the numbers between 2 and $1/2$ of the number itself, inclusive. That is; see if there is a remainder for the division X/Y where X is the number to be checked and Y is any number from the sequence $2 \dots (X/2 - 1)$. If there is no remainder then X is not a prime number.

```
int IsPrime(int X){
    int i;
    if(X<0) X=-X;
    if(X<3) return 1; /* assume 0 1 2 are prime */
    if(!(X&1)) return 0; /* even number */
    for(i=2;i<=X/2;i++)
        if(!(X%i)) return 0;
    return 1;
}
```

2. Write a program (function `main`) which calculates and displays the sum of prime numbers ranging from $N1$ to $N2$. The numbers $N1$ and $N2$ are entered by the user. Use the `IsPrime` function declared as

```
int IsPrime(int X);
```

You do not have to rewrite `IsPrime` function here, but just call it when needed.

```
int main(void){
    int N1,N2,i,sum=0;
    printf("Enter N1 and N2 :");
    scanf("%d %d",&N1,&N2);
    if(N1>N2) {i=N1;N1=N2;N2=i;}
    for(i=N1;i<=N2;i++)
        if(IsPrime(i)) sum+=i;
    printf("The sum is %d\n",sum);
    return 0;
}
```