

```
typedef struct
```

```
{  
    int n;  
    int* pTrouve;  
    int debut;  
    int fin;  
} data;
```

```
int est_premier(int n)
```

```
{  
    data d[NB_THREADS];  
    pthread_t T[NB_THREADS];  
    int trouve = 0;  
    int i;  
    int rc = racine_carre(n);  
    for (i = 0; i < NB_THREADS; ++i)  
    {  
        d[i].n = n;  
        d[i].pTrouve = &trouve;  
        d[i].debut = 2 + i*(rc-2)/NB_THREAD;  
        d[i].fin = 1 + (i+1)*(rc-2)/NB_THREAD;  
        pthread_create(&T[i], NULL, (void *(*)(void*))div_dans_inter, (void*)&d[i]);  
    }  
    for (i=0; i < NB_THREADS; ++i)  
    {  
        pthread_join(T[i], NULL);  
    }  
    return !trouve;  
}
```

```
void div_dans_inter(data *pd)
```

```
{  
    int i;  
    for (i = pd -> debut; i <= pd -> fin &&(!*pd->pTrouve) ; ++i) {  
        if (pd -> n % i == 0) { *pd -> pTrouve = 1; }  
    }  
}
```