

```
ubuntu@ubuntu2004:~/Desktop/ex_7$ ./7a
```

```
0 prime numbers calculated  
1 prime numbers calculated  
2 prime numbers calculated  
2 prime numbers calculated  
3 prime numbers calculated  
3 prime numbers calculated  
4 prime numbers calculated  
4 prime numbers calculated  
4 prime numbers calculated  
4 prime numbers calculated  
5 prime numbers calculated
```

```
#include<stdio.h>
#include<time.h>
int main(){
int j,k,n;
while(1){
printf("Enter any number:");
scanf("%d",&j);
printf("Enter any number:");
scanf("%d",&k);
n=j%k;
printf("remainder: %d",n);
time_t rawtime;
struct tm* timeinfo;
time(&rawtime);
timeinfo= localtime(&rawtime);
printf("\nCurrent local time and date: %s", asctime(timeinfo));
}
```

top - 0:02.08c											
PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
2305	ubuntu	20	0	2496	584	516	R	76.6	0.0	0:03.23	7a
1935	ubuntu	20	0	824216	52676	39172	S	33.6	1.3	1:05.62	gnome-t+
1436	ubuntu	20	0	269552	57784	37916	S	21.4	1.4	0:37.13	Xorg
1605	ubuntu	20	0	4080956	233140	98332	S	19.4	5.8	0:50.74	gnome-s+
2104	root	20	0	0	0	0	I	8.9	0.0	0:08.47	kworker+
2076	root	20	0	0	0	0	I	3.6	0.0	0:10.41	kworker+
2206	ubuntu	20	0	20624	4072	3304	R	0.7	0.1	0:02.08	top

Enter any number: 85

Enter any number: 69

16

Current local time and date: Wed Nov 23 22:26:21 2022

Enter any number:

```
top - 22:26:50 up 45 min, 1 user, load average: 0.48, 0.46, 0.32
Tasks: 222 total, 1 running, 221 sleeping, 0 stopped, 0 zombie
Cpu(s): 6.0 us, 0.0 sy, 0.0 ni, 94.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
Mem : 3923.3 total, 1237.8 free, 977.9 used, 1787.7 buff/cache
Mem Swap: 2090.0 total, 2090.0 free, 0.0 used, 2659.0 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
3781	root	20	0	0	0	0	I	0.0	0.0	0:03.24	kworker/u10:2-events_unbound
3782	rakshit	20	0	21864	4208	3348	R	0.0	0.1	0:00.98	top
3793	rakshit	20	0	2772	1048	960	S	0.0	0.0	0:00.00	a.out

```
#include<stdio.h>
#include<time.h>
void main(){
    clock_t start, end;
    double runtime;
    start = clock();
    int i, num=1, prime =0;
    while(num<=100000000){
        i=2;
        while(i<=num){
            if(num%i==0)
                break;
            i++;
        }
        if(i==num)
            prime++;
        num++;
    }
    end = clock();
    runtime = (double)(end - start) / CLOCKS_PER_SEC;
    printf("Prime numbers upto 100000000 are: %d\n", prime);
    printf("Time taken: %f\n", runtime);
}
```