

## Gcd with recursion:

```
1  #include <stdio.h>
2  int hcf(int n1, int n2);
3  int main() {
4      int n1, n2;
5      printf("Enter two positive integers: ");
6      scanf("%d %d", &n1, &n2);
7      printf("G.C.D of %d and %d is %d.", n1, n2, hcf(n1, n2));
8      return 0;
9  }
10
11 int hcf(int n1, int n2) {
12     if (n2 != 0)
13         return hcf(n2, n1 % n2);
14     else
15         return n1;
16 }
```

Enter two positive integers: 960

68

G.C.D of 960 and 68 is 4.

...Program finished with exit code 0

Press ENTER to exit console.

## Gcd with loop:

```
1  #include <stdio.h>
2  int main()
3  {
4      int n1, n2;
5
6      printf("Enter two positive integers: ");
7      scanf("%d %d",&n1,&n2);
8
9      while(n1!=n2)
10     {
11         if(n1 > n2)
12             n1 -= n2;
13         else
14             n2 -= n1;
15     }
16     printf("GCD = %d",n1);
17
18     return 0;
19 }
```

input

```
Enter two positive integers: 960
68
GCD = 4

...Program finished with exit code 0
Press ENTER to exit console.
```