

```
/**   Program to Find HCF of Two Numbers Without Recursion   **/
```

```
#include <stdio.h>
```

```
main()
```

```
{
```

```
    int q, m, n, temp;
```

```
    printf("\nEnter values of two numbers: ");
```

```
    scanf("%d %d", &m, &n);
```

```
    if (m == 0)
```

```
    {
```

```
        printf("\nHCF of number is: %d", n);
```

```
        goto end;
```

```
    }
```

```
    if (n == 0)
```

```
    {
```

```
        printf("\nHCF of numbers is: %d", m);
```

```
        goto end;
```

```
    }
```

```
    if (n > m)
```

```
    {
```

```
        temp = m;
```

```
        m = n;
```

```
        n = temp;
```

```
    }
```

```
q = 1;

while (q != 0)
{
    q = m % n;
    if (q != 0)
    {
        m = n;
        n = q;
    }
}

printf("\nHCF of number is: %d", n);
end:
    getch();
}
```