

Q) Write a Program to find the factorial of a number using recursion.  
→ I/P

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

```
int factorial (int n) {
```

```
if (n == 0 || n == 1)
```

```
return 1;
```

```
else
```

```
return n = factorial (n - 1);
```

```
}
```

```
int main () {
```

```
int num;
```

```
printf ("Enter a number : ");
```

```
scanf ("%d", &num);
```

```
printf ("factorial = %d", factorial (num));
```

```
return 0;
```

```
}
```

```
}
```

O/P

enter a number : 10

factorial = 3628800

main.c



Share

Run

Output

Clear

```
1 #include <stdio.h>
2
3 int factorial(int n) {
4     if (n == 0 || n == 1)
5         return 1;
6     else
7         return n * factorial(n - 1);
8 }
9
10 int main() {
11     int num;
12
13     printf("Enter a number: ");
14     scanf("%d", &num);
15
16     printf("Factorial = %d\n", factorial(num));
17
18     return 0;
19 }
```

Enter a number: 6

Factorial = 720

=== Code Execution Successful ===