

## Day-23 of 101 days coding challenge

⇒ **Recursion:**

➔ A function calls itself to make program smaller till the condition satisfied.

➔ Example:

Code:

```
// recursively calling function to find the power
```

```
#include<iostream>
```

```
using namespace std;
```

```
int power(int n, int p)
```

```
{
```

```
    if(p == 0){ // defined the base condition so that function calling can be  
    stoped
```

```
        return 1;
```

```
    }
```

```
    // recursively calling the function
```

```
    return n * power(n, p-1);
```

```
}
```

```
int main()
```

```
{
```

```
    int n , p;
```

```
    cout<<"Enter the value and value of the power"<<endl;

    cin>>n>>p;

    // calling the function

    int result = power(n, p);

    cout<<"Power value is:"<<result<<endl;

    return 0;

}
```

Output:

```
Enter the value and value of the power
5
4
Power value is:625

-----
Process exited after 4.779 seconds with return value 0
Press any key to continue . . .
```