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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **Problem Solving Through Programming In C (course)**



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Course
outline

How does an
NPTEL
online
course
work? ()

Week 0 : ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 : Programming Assignment 2

Due on 2023-09-21, 23:59 IST

Write a C Program to find power of a given number using recursion. The number and the power to be calculated is taken from test case

Private Test cases used for evaluation	Input	Expected Output	Actual Output	Status
Test Case 1	16 3	16^3 is 4096	16^3 is 4096	Passed

The due date for submitting this assignment has passed.

1 out of 1 tests passed.

You scored 100.0/100.

Assignment submitted on 2023-09-21, 20:11 IST

Your last recorded submission was :

```

1 #include <stdio.h>
2 long power(int, int);
3 int main()
4 {
5     int pow, num;
6     long result;
7
8     scanf("%d", &num); //The number taken as input from test case data
9
10    scanf("%d", &pow); //The power is taken from the test case
11    result = power(num, pow);
12    printf("%d^%d is %ld", num, pow, result);
13    return 0;
14 }
15 long power(int num,int pow)
16 {
17     if(pow)
18     {
19         return (num*power(num,pow-1));
20     }
21     return 1;
22 }
```



[Week 8 \(\)](#)[Week 9 \(\)](#)[Week 10 \(\)](#)[Week 11 \(\)](#)[Week 12 \(\)](#)[DOWNLOAD
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Solving
Session -
July 2023 \(\)](#)

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Sample solutions (Provided by instructor)

```
1 #include <stdio.h>
2 long power(int, int);
3 int main()
4 {
5     int pow, num;
6     long result;
7
8     scanf("%d", &num); //The number taken as input from test case data
9
10    scanf("%d", &pow); //The power is taken from the test case
11    result = power(num, pow);
12    printf("%d^%d is %ld", num, pow, result);
13    return 0;
14 }
15 long power(int num, int pow)
16 {
17     if (pow)
18     {
19         return (num * power(num, pow - 1));
20     }
21     return 1;
22 }
```

