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reviewer4@nptel.iitm.ac.in ▾

**NPTEL** (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **An Introduction To Programming Through C++**  
(course)

Announcements (announcements)

**About the Course** ([https://swayam.gov.in/nd1\\_noc20\\_cs53/preview](https://swayam.gov.in/nd1_noc20_cs53/preview)) Ask a Question (forum)

Progress (student/home) Mentor (student/mentor)

## Week 1 - Programming Assignment 2

**Due on 2020-02-12, 23:59 IST**

Write a program that reads in a number and prints out the letter T using '\*' characters with each line in the T having width n. Further, the length of the horizontal bar should be 3n, and that of the vertical bar 2n. Thus for n=3 your program should print

```
*****
*****
*****
  ***
  ***
  ***
  ***
  ***
  ***
```

### Sample Test Cases

Test Case 1

Input

2

Output

```
*****
*****
  **
  **
  **
  **
```

### Course outline

#### How does an NPTEL online course work?

#### Week 0

#### Week 1

- ☒ Lecture 1 Part 1: Introduction (unit? unit=17&lesson=25)
- ☐ Lecture 1 Part 2 : Introduction (unit? unit=17&lesson=29)
- ☐ Lecture 1 Part 3 : Introduction (unit? unit=17&lesson=31)
- ☐ Lecture 1 Part 4 : Introduction (unit? unit=17&lesson=30)
- ☐ Lecture 2 Part 1 : Problem

Solving using  
Computer  
(unit?  
unit=17&lesson=33)

☒ Lecture 2 Part  
2 : Problem  
Solving using  
Computer  
(unit?  
unit=17&lesson=32)

Test Case 2

3

```
*****
*****
*****

***
***
***
***
***
***
```

☒ Lecture 2 Part  
3 : Problem  
Solving using  
Computer  
(unit?  
unit=17&lesson=34)

The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.  
Sample solutions (Provided by instructor)

☐ Lecture 2 Part  
4 : Problem  
Solving using  
Computer  
(unit?  
unit=17&lesson=35)

☒ Lecture 2 Part  
5 : Problem  
Solving using  
Computer  
(unit?  
unit=17&lesson=36)

☐ Week 1 -  
Programming  
Assignment 1  
(/noc20\_cs53/progassignig  
name=163)

```
1 #include <iostream>
2 #define repeat(x) for(int _iterator_i = 0, _iterator_limit = x; _itera
3 #define main_program int main()
4 #include <cmath>
5 using namespace std;
6 main_program{
7     int n;
8     cin >> n;
9     // print the horizontal bar
10    repeat(n){
11        repeat(3*n){
12            cout <<'*';
13        }
14        cout << endl;
15    }
16    // print the vertical bar
17    repeat(2*n){
18        repeat(n){
19            cout <<' '; // print blank
20        }
21        repeat(n){
22            cout <<'*';
23        }
24        cout << endl;
25    }
26 }
```

☐ **Week 1 -  
Programming  
Assignment 2**  
(/noc20\_cs53/progassignment?  
name=164)

☐ Quiz : Week 1  
Quiz 1  
(assessment?  
name=165)

☐ Download  
Videos (unit?  
unit=17&lesson=177)

☐ Weekly  
Feedback  
(unit?  
unit=17&lesson=189)

**Week 2**

**Week 3**

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**Week 4**

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**Week 5**

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**Week 6**

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**Week 7**

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**Week 8**

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**Week 9**

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**Week 10**

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**Week 11**

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**Week 12**

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**Text Transcripts**

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