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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) Ask a Question (forum)

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

Week3 Programming Assignment 1

Due on 2020-02-19, 23:59 IST

Write a program which prints the sum of the cubes of the digits of a number.

Sample Test Cases

	Input	Output
Test Case 1	70000001	344
Test Case 2	120	9
Test Case 3	123405	225
Test Case 4	0	0

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Sample solutions (Provided by instructor)

```

1 #include <iostream>
2 #define repeat(x) for(int _iterator_i = 0, _iterator_limit = x; _iterator_i < _iterator_limit; _iterator_i++)
3 #define main_program int main()
4 #include <cmath>
5 using namespace std;
6 main_program{
7     int number; cin >> number;
8     int cubesum=0;
9     while(number > 0){
10         int digit = number % 10;
11         cubesum = cubesum + digit*digit*digit;
12         number = number/10;
13     }
14     cout << cubesum << endl;

```

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

- Lecture 6 Part 1 : Conditional Execution (unit? unit=45&lesson=46)
- Lecture 6 Part 2 : Most general form of if (unit? unit=45&lesson=47)
- Lecture 6 Part 3 : More general form of conditions

```
(unit?  
unit=45&lesson=48) 15 | }  
16  
17 |
```

- ☐ Lecture 6 Part
4 : A
somewhat
large program
example (unit?
unit=45&lesson=49)
- ☐ Lecture 6 Part
5 : Switch
statement and
logical data
(unit?
unit=45&lesson=50)
- ☒ Lecture 7 Part
1 : Loops
(unit?
unit=45&lesson=51)
- ☐ Lecture 7 Part
2 : Mark
averaging
(unit?
unit=45&lesson=52)
- ☐ Lecture 7 Part
3 : The break
and continue
statements
(unit?
unit=45&lesson=53)
- ☐ Lecture 7 Part
4 : The for
statement
(unit?
unit=45&lesson=55)
- ☒ Lecture 7 Part
5 : Euclid's
algorithm for
GCD (unit?
unit=45&lesson=54)
- ☐ Lecture 7 Part
6 : Correctness
proof for GCD
(unit?
unit=45&lesson=56)
- ☐ Quiz : Week3
Quiz
(assessment?
name=167)
- ☐ **Week3
Programming
Assignment 1
(/noc20_cs53/progassignment?
name=170)**

☐ Week 3
Programmng
Assignment 2
(/noc20_cs53/progassignment?
name=171)

☐ Download
Videos (unit?
unit=45&lesson=179)

☐ Weekly
Feedback
(unit?
unit=45&lesson=191)

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

Text Transcripts