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vp2749@srmist.edu.in ⌄

NPTEL (https://swayam.gov.in/explorer?ncCode=NPTEL) » Programming in C++ (course)

Announcements (announcements)   **About the Course (preview)**   Ask a Question (forum)

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

W7_Programming-Qs1

Due on 2020-11-05, 23:59 IST

Consider the following program. Fill in the blanks at `LINE-1` (Casting using constructor) and `LINE-2` (User defined cast using operator function) with appropriate expression for casting between two unrelated classes such that it would satisfy the given test cases.

Private Test cases used for evaluation	Input	Expected Output	Actual Output	Status
Test Case 1	1 0	100:10:220: 11:	100:10:220:1 1:	Passe d

The due date for submitting this assignment has passed.
1 out of 1 tests passed.
You scored 100.0/100.

Assignment submitted on 2020-11-05, 23:17 IST
Your last recorded submission was :

```
 1  #include <iostream>
 2  using namespace std;
 3
 4  class A {
 5      int i;
 6  public:
 7      A(int ai) : i(ai) {}
 8      int get() const { return i; }
 9      void update() { i *= 10; }
10  };
11
12  class B {
13      int i;
14  public:
15      B(int ai) : i(ai) {}
16      int get() const { return i; }
17  B(A& a):i(a.get()){} // LINE-1
18  operator A() {return A(i);}// LINE-2
19      void update() { i *= 20; }
```

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

◯ Module 31 : Virtual Function Table (Lecture 46) (unit? unit=80&lesson=81)

◯ Module 32 : Type Casting and Cast Operators : Part I (Lecture 47)

```cpp
20 };
21
22 int main() {
23     int i;
24     cin >> i;
25
26     A a(i++);
27     B b(i);
28
29     const B &r = static_cast<B>(a);
30     a.update();
31     cout << a.get() << ":";
32     cout << r.get() << ":";
33
34     const A &s = static_cast<A>(b);
35     b.update();
36     cout << b.get() << ":";
37     cout << s.get() << ":";
38
39     return 0;
40 }
```

○ Feedback For
Week 7 (unit?
unit=80&lesson=88)

Week 8

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VIDEOS**

Text Transcripts

**Assignment
Solution**

Books

**Live Interactive
Session**

**Programming Test
(11th Dec):
Session-1
(10.00AM -
11.00AM)**

**Programming Test
(11th Dec):
Session-2 (8.00PM
- 9.00PM)**