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[NPTEL \(https://swayam.gov.in/explorer?ncCode=NPTEL\)](https://swayam.gov.in/explorer?ncCode=NPTEL) » **Programming in C++ (course)**
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## W6\_Programming-Qs2

**Due on 2020-10-29, 23:59 IST**

### Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

☐ Module 26 :  
Dynamic Binding  
: Part I (Lecture  
41) (unit?  
unit=72&lesson=73)

☐ Module 27 :  
Dynamic Binding  
(Polymorphism) :  
Part II (Lecture  
42) (unit?  
unit=72&lesson=74)

Consider the program below. Fill in the blank at LINE-1 with abstract function declaration for Salary(). Fill in the at LINE-2 with proper header of the function. Fill in the blanks at LINE-3 and LINE-4 with appropriate statement to call function computeAllowance() such that that it satisfies the given test cases. *Do not change any other part of the code.*

Private Test cases used for evaluation

	Input	Expected Output	Actual Output	Status
Test Case 1	50000 80000	HOD Salary = 55000\n Director Salary = 88000\n	HOD Salary = 55000\n Director Salary = 88000\n	Passed

The due date for submitting this assignment has passed.

1 out of 1 tests passed.

You scored 100.0/100.

**Assignment submitted on 2020-10-29, 23:01 IST**

Your last recorded submission was :

```

1 #include <iostream>
2 using namespace std;
3
4 class Professor { double allowance = 10;
5 public:
6     virtual void Salary()=0;           // LINE-1
7     double computeAllowance(int);
8 };
9
10 double Professor::computeAllowance(int basic) {    // LINE-2
11     return (basic*allowance / 100);
12 }
```

Module 28 :  
Dynamic Binding  
(Polymorphism) :  
Part III (Lecture  
43) (unit?  
unit=72&lesson=75)

Module 29 :  
Dynamic Binding  
(Polymorphism)  
Part IV (Lecture  
44) (unit?  
unit=72&lesson=76)

Module 30 :  
Dynamic Binding  
(Polymorphism) :  
Part V (Lecture  
45) (unit?  
unit=72&lesson=77)

Lecture Materials  
(unit?  
unit=72&lesson=78)

Quiz :  
Assignment 6  
(assessment?  
name=163)

W6\_Programming-  
Qs1  
(/noc20\_cs57/progassignment?  
name=164)

**W6\_Programming-  
Qs2  
(/noc20\_cs57/progassignment?  
name=165)**

W6\_Programming-  
Qs3  
(/noc20\_cs57/progassignment?  
name=166)

W6\_Programming-  
Qs4  
(/noc20\_cs57/progassignment?  
name=167)

Feedback For  
Week 6 (unit?  
unit=72&lesson=79)

## Week 7

## Week 8

```

13
14 class HOD : public Professor { int basic;
15 public:
16     HOD(int _b) : basic(_b) { }
17     void Salary() {
18         double a = computeAllowance(basic); // LINE-3: Call computeAllowance()
19         cout << "HOD Salary = " << (basic + a) << endl;
20     }
21 };
22
23 class Director : public Professor { int basic;
24 public:
25     Director(int _b) : basic(_b) { }
26     void Salary() {
27         double a = computeAllowance(basic); // LINE-4: : Call computeAllowance()
28         cout << "Director Salary = " << (basic + a) << endl;
29     }
30 };
31
32 int main() {
33     int h, d;
34     Professor *p;
35
36     cin >> h >> d;
37
38     p = new HOD(h);
39     p->Salary();
40
41     p = new Director(d);
42     p->Salary();
43
44     return 0;
45 }

```

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

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