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W7_Programming-Qs2

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

Consider the following program. Fill in the blanks at `LINE-1` with appropriate abstract function definition for function `fun()`, and `LINE-2, LINE-3` and `LINE-4` with appropriate inheritance such that it matches the given test cases.

Private Test cases used for evaluation	Input	Expected Output	Actual Output	Status
Test Case 1	1 0	100 20 0	100 20 0	Passed

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

Assignment submitted on 2020-11-05, 23:22 IST

Your last recorded submission was :

```
1  #include <iostream>
2  using namespace std;
3
4  class A {
5  protected:
6      int i;
7  public:
8      A(int a = 0) : i(a) { }
9      void set(int a) {
10         i = a;
11         cout << i << " ";
12     }
13     // create abstract function fun()
14     virtual void fun()=0; // LINE-1
15 };
16
17 class B : public A {  // LINE-2
18 public:
19     B(int a = 0) : A(a) { }
20     void fun() { set(i * 10); }
```

```
};

class C : public A {  // LINE-3
public:
    C(int a = 0) : A(a) { }
    void fun() { set(i + 10); }
};

class D :public A {  // LINE-4
public:
    D(int a = 0) : A(a) { }
    void fun() { set(i - 10); }
};

int main() {
    int num;
    cin >> num;

    A *pt[3] = { new B(num), new C(num), new D(num) };
    for (int i = 0; i < 3; i++) {
        pt[i]->fun();
    }

    return 0;
}
```