**Accessing Inherited Functions**

https://cdn.hrcdn.net/s3_pub/hr-avatars/8d3fabd9-2280-4e75-8cca-9ea9d80415b1/150x150.png**by [vatsalchanana](https://www.hackerrank.com/vatsalchanana)**

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You are given three classes *A, B* and *C*. All three classes implement their own version of *func*.

In class *A*, *func* multiplies the value passed as a parameter by :

class A

{

protected:

void func(int & a)

{

a=a\*2;

}

}

In class *B*, *func* multiplies the value passed as a parameter by :

class B

{

protected:

void func(int & a)

{

a=a\*3;

}

}

In class *C*, *func* multiplies the value passed as a parameter by :

class C

{

protected:

void func(int & a)

{

a=a\*5;

}

}

You are given a class *D*:

class D

{

int val;

public:

//Initially, val is 1

D()

{

val=1;

}

//Implement this function

void update\_val(int new\_val)

{

}

}

You need to modify the class *D* and implement the function update\_val which sets *D*'s *val* to *new\_val* by manipulating the value by only calling the *func* defined in classes *A, B* and *C*.

**It is guaranteed that *new\_val* has only  and  as its prime factors.**

**Input Format**

Implement class *D*'s function *update\_val*. This function should update *D*'s *val* only by calling *A, B* and *C*'s *func*.

**Constraints**

*new\_val*    
**Note:** The *new\_val* only has  and  as its prime factors.

**Sample Input**

*new\_val*

**Sample Output**

*A*'s *func* will be called once.   
*B*'s *func* will be called once.   
*C*'s *func* will be called once.

**Explanation**

Initially, *val* .

*A*'s *func* is called once:

val = val\*2

val = 2

*B*'s *func* is called once:

val = val\*3

val = 6

*C*'s *func* is called once:

val = val\*5

val = 30

**Compilation error**

**Compile Message**

solution.cc: In function ‘void update\_val(int)’:

solution.cc:67:25: error: ‘val’ was not declared in this scope

a.func(val);

^

solution.cc:72:27: error: ‘val’ was not declared in this scope

b.func(val);

^

solution.cc:77:29: error: ‘val’ was not declared in this scope

c.func(val);

^