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ANYTIME THE BASE CLASS CHANGES PEFAULT VALUES, THE PERIVED CLASS MUST DO THE SAME (TO STAY IN SYNCH)

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ANYTIME THE BASE CLASS CHANGES DEFAULT VALUES, THE DERIVED CLASS MUST DO THE SAME (TO STAY IN SYNCH)

```
class Shape
{
    ...
    virtual void printNumber(int number=10)
        {
        cout << "I am a shape - printing number" << number << endl;
        }
};</pre>
```

```
class Rectangle : public Shape
    virtual void printNumber(int number=20)
    {
       cout << "I am a rectangle - printing number" << number << endl;
    }
};</pre>
```

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class Shape
 virtual void printNumber(int number=10)
    cout << "I am a shape - printing number" << number << endl;</pre>
                                       DERIVED CLASS
class Rectangle : public Shape
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class Shape
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};
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EXAMPLE 60: VIRTUAL FUNCTIONS SHOULD NEVER HAVE PEFAULT PARAMETERS BASE CLASS class Shape

```
virtual void printNumber(int number=10)
    cout << "I am a shape - printing number" << number << endl;</pre>
                                       DERIVED CLASS
class Rectangle : public Shape
 virtual void printNumber(int number=20)
   cout << "I am a rectangle - printing number" << number << endl;</pre>
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```
class Shape
 virtual void printNumber(int number=10)
   cout << "I am a shape - printing number" << number << endl;</pre>
class Rectangle : public Shape
 virtual void printNumber(int number = 20)
   cout << "I am a rectangle - printing number" << number << endl;</pre>
                                         Shape * s = new Rectangle();
                                         s->printNumber();
```

THE PERIVEP CLASS FUNCTION WILL BE CALLED, BUT WITH BASE CLASS PEFAULT VALUES

```
[Vitthals-MacBook-Pro:~ vitthalsrinivasan$ g++ -Wall Example60.cpp [Vitthals-MacBook-Pro:~ vitthalsrinivasan$ ./a.out Inside the Shape constructor Inside the Rectangle constructor I am a rectangle - printing number10 Inside the Rectangle destructor Inside the Shape destructor
```

THE PERIVEP CLASS FUNCTION WILL BE CALLED, BUT WITH BASE CLASS PEFAULT VALUES

```
Shape * s = new Rectangle();
s->printNumber();
```

```
[Vitthals-MacBook-Pro:~ vitthalsrinivasan$ g++ -Wall Example60.cpp [Vitthals-MacBook-Pro:~ vitthalsrinivasan$ ./a.out Inside the Shape constructor Inside the Rectangle constructor I am a rectangle - printing number10 Inside the Rectangle destructor Inside the Shape destructor
```

CHAOS.