

# Demonstrate the ByTwos interface 2

```
/*
C#: The Complete Reference
by Herbert Schildt

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*/
using System;

public interface ISeries {
int getNext(); // return next number in series
void reset(); // restart
void setStart(int x); // set starting value
}

// Use ISeries to generate a sequence of even numbers.
class ByTwos : ISeries {
int start;
int val;

public ByTwos() {
start = 0;
val = 0;
}

public int getNext() {
val += 2;
return val;
}

public void reset() {
val = start;
}
}
```

```
public void setStart(int x) {
start = x;
val = start;
}
}
```

```
// Use ISeries to implement a series of prime numbers.
```

```
class Primes : ISeries {
int start;
int val;
```

```
public Primes() {
start = 2;
val = 2;
}
```

```
public int getNext() {
int i, j;
bool isprime;
```

```
val++;
```

```
for(i = val; i < 1000000; i++) { isprime = true; for(j = 2; j
< (i/j + 1); j++) { if((i%j)==0) { isprime = false; break; } }
if(isprime) { val = i; break; } } return val; } public void
reset() { val = start; } public void setStart(int x) { start =
x; val = start; } } public class SeriesDemo2 { public static
void Main() { ByTwos twoOb = new ByTwos(); Primes primeOb =
new Primes(); ISeries ob; for(int i=0; i < 5; i++) { ob =
twoOb; Console.WriteLine("Next ByTwos value is " +
ob.getNext()); ob = primeOb; Console.WriteLine("Next prime
number is " + ob.getNext()); } } } [/csharp]
```