

< average

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## O BJP5 Exercise 4.14: pow2

Language/Type: 

Java <u>if/else for loops method basics parameters return</u>

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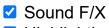
Write a method named pow2 (a variation of the previous pow exercise) that accepts a real number base and an integer exponent as parameters and returns the base raised to the given power. Your code should work for both positive and negative exponents. For example, the call pow2(2.0, -2) returns 0.25. Do not use Math.pow in your solution.

```
Type your solution here:
 1
 2
 3
 4
 5
 6
 7
   static double pow2(double base,int exponent){
            double result=1;
 8
 9
            if (exponent == 0)
10
11
                return result;
12
13
            //positive
            while(exponent > 0){
14
15
                  result *= base;
16
                exponent--;
17
            }
18
19
            //negative
            while(exponent < 0 ){</pre>
20
21
                result /= base;
22
                exponent++;
23
            }
24
25
26
27
28
            return result;
29
       }
```

This is a **method problem.** Write a Java method as described. Do not write a complete program or class; just the method(s) above.

**Submit** 







## **⊘** You passed 11 of 11 tests.

Go to the next problem: getGrade

test #1:	pow2(3.0, 4)
return:	81.0
result:	
test #2:	pow2(2.0, 9)
return:	512.0
result:	❷ pass
test #3:	pow2(5.0, 7)
return:	78125.0
result:	
test #4:	pow2(3.0, 14)
return:	4782969.0
result:	pass
test #5:	pow2(1.0, 10)
return:	1.0
result:	❷ pass
test #6:	pow2(10.0, 1)
return:	10.0
result:	❷ pass
test #7:	pow2(0.0, 8)
return:	0.0
result:	❷ pass
test #8:	pow2(8.0, 0)
return:	1.0
result:	❷ pass
test #9: return: result:	pow2(3.5, 3) 42.875
test #10:	pow2(2, -2)

return: 0.25 result: ⊙ pass

test #11: pow2(8.0, -1)

problems/tests, etc.), please contact us.

If you do not understand how to solve a problem or why your solution doesn't work, please contact your TA or instructor.

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