

IT-projects programming beginners

Homework till March 27, 2017

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- Ex. 1 Declare a integer variable and write a Java program to print whether it is positive, negative or zero.
- Ex. 2 In austrian schools grades range from 1 (best grade) to 5 (worst grade). Write a Java program which declares an integer-variable representing a grade of student. Print a feedback based on the grade. If the grade is 1 print "Excellent!", if it's 2 "Nicely done!", if it's 3 "Good work", if it's 4 "You passed the course" and for 5 "Maybe next time". For any other grade print "Invalid grade". Use a switch-statement for this exercise.
- Ex. 3 Write a Java program that declares a floating-point number and prints "zero" if the number is zero. Otherwise, print "positive" or "negative". Add "small" if the absolute value of the number is less than 1, or "large" if it exceeds 1,000,000.
- Optional Ex. "FizzBuzz" is a children's game where you count from 1 to 100. However, instead of multiples of 3 you have to say "Fizz" and multiples of 5 get replaced with "Buzz". A number divisible by 3 and 5 is replaced by "FizzBuzz". Write a Java program which plays this game. The start of the program's output should look the following:
1 2 Fizz 4 Buzz Fizz 7 8 Fizz Buzz 11 Fizz 13 14 FizzBuzz 16 17 Fizz ...
Hint: Use a for-loop to "count" from 1 to 100 and if-statements to decide whether to print the number "Fizz", "Buzz" or "FizzBuzz". To check whether a number x is divisible by say 2 you can use the modulo-operator "%" and write "x % 2 == 0". This expression is true if x is divisible by 2 and false otherwise.