

1.	<p>Write a Java program to print 'Hello' on screen and then print your name on a separate line.</p> <p>Expected Output:</p> <p>Hello</p> <p>Donald Trump</p>
2.	<p>A school has following rules for grading system: a.</p> <p>Below 25 - F</p> <p>b. 25 to 45 - E</p> <p>c. 45 to 50 - D</p> <p>d. 50 to 60 - C</p> <p>e. 60 to 80 - B</p> <p>f. Above 80 - A</p> <p>Ask user to enter marks and print the corresponding grade.</p>
3.	<p>Create a function that takes two numbers as arguments and returns the GCD of the two numbers.</p> <p>Examples</p> <p><math>\text{gcd}(3, 5) \rightarrow 1</math></p> <p><math>\text{gcd}(14, 28) \rightarrow 14</math></p> <p><math>\text{gcd}(4, 18) \rightarrow 2</math></p>
4.	<p>Given an integer, create a function that returns the next prime. If the number is prime, return the number itself.</p> <p>Examples <math>\text{nextPrime}(12)</math></p> <p><math>\rightarrow 13</math> <math>\text{nextPrime}(24) \rightarrow</math></p> <p><math>29</math> <math>\text{nextPrime}(11) \rightarrow 11</math></p> <p>// 11 is a prime, so we return the number itself.</p>
5.	<p>Write a Java program that takes two numbers as input and display the product of two numbers. Test Data:</p> <p>Input first number: 25</p> <p>Input second number: 5</p> <p>Expected Output:</p> <p><math>25 \times 5 = 125</math></p>

<b>6.</b>	<p>Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.</p> <p>Test Data:  Input first number: 125  Input second number: 24  Expected Output:  <math>125 + 24 = 149</math>  <math>125 - 24 = 101</math>  <math>125 \times 24 = 3000</math>  <math>125 / 24 = 5</math></p>
<b>7.</b>	<p>Write a Java program that takes a number as input and prints its multiplication table upto 10.</p> <p>Test Data:  Input a number: 8  Expected Output:  <math>8 \times 1 = 8</math>  <math>8 \times 2 = 16</math>  <math>8 \times 3 = 24</math>  <math>8 \times 10 = 80</math></p>
<b>8.</b>	<p>Create a function that finds how many prime numbers there are, up to the given integer.</p> <p>Examples  <math>\text{primeNumbers}(10) \rightarrow 4</math>  // 2, 3, 5 and 7  <math>\text{primeNumbers}(20) \rightarrow 8</math>  // 2, 3, 5, 7, 11, 13, 17 and 19  <math>\text{primeNumbers}(30) \rightarrow 10</math>  // 2, 3, 5, 7, 11, 13, 17, 19, 23 and 29</p>
<b>9.</b>	<p>Write a Java program to compute a specified formula.</p> <p>Specified Formula:  <math>4.0 * (1 - (1.0/3) + (1.0/5) - (1.0/7) + (1.0/9) - (1.0/11))</math>  Expected Output  2.9760461760461765</p>
<b>10.</b>	<p>Write a Java program to print the area and perimeter of a circle.</p> <p>Test Data: Radius  = 7.5  Expected Output  Perimeter is = 47.12388980384689  Area is = 176.71458676442586</p>
<b>11.</b>	<p>Write a Java program that takes three numbers as input to calculate and print the average of the numbers.</p>
<b>12.</b>	<p>Write a Java program to print the area and perimeter of a rectangle.</p> <p>Test Data: Width = 5.5 Height = 8.5  Expected Output Area  is <math>5.6 * 8.5 = 47.60</math>  Perimeter is <math>2 * (5.6 + 8.5) = 28.20</math></p>
<b>13.</b>	<p>Write a Java program to swap two variables.</p>

<b>14.</b>	<p>Write a Java program to compare two numbers.</p> <p>Input Data:</p> <p>Input first integer: 25</p> <p>Input second integer: 39</p> <p>Expected Output</p> <p>25 != 39</p> <p>25 &lt; 39</p> <p>25 &lt;= 39</p>
<b>15.</b>	<p>Write a Java program and compute the sum of the digits of an integer.</p> <p>Input Data:</p> <p>Input an integer: 25</p> <p>Expected Output</p> <p>The sum of the digits is: 7</p>
<b>16.</b>	<p>Write a Java program to print the odd numbers from 1 to 99. Prints one number per line.</p> <p>Sample Output:</p> <p>1</p> <p>3</p> <p>5</p> <p>....</p> <p>97</p> <p>99</p>
<b>17.</b>	<p>Create a function that takes an integer n and reverses it.</p> <p>Examples rev(5121)</p> <p>→ "1215" rev(69) →</p> <p>"96"</p> <p>rev(-122157) → "751221"</p> <p>Notes</p> <p>This challenge is about using two operators that are related to division.</p> <p>If the number is negative, treat it like it's positive.</p>
<b>18.</b>	<p>Write a Java program to calculate the sum of two integers and return true if the sum is equal to a third integer.</p> <p>Sample Output:</p> <p>Input the first number : 5</p> <p>Input the second number: 10</p> <p>Input the third number : 15</p> <p>The result is: true</p>
<b>19.</b>	<p>Write a Java program that accepts three integer values and return true if one of them is 20 or more and less than the subtractions of others.</p> <p>Sample Output:</p> <p>the first number: 15</p> <p>Input the second number: 20</p> <p>Input the third number: 25</p> <p style="text-align: right;">Input</p> <p style="text-align: right;">false</p>

<b>20.</b>	<p>Write a Java program that accepts two integer values between 25 to 75 and return true if there is a common digit in both numbers.</p> <p>Sample Output:</p> <p>Input the first number : 35</p> <p>Input the second number: 45</p> <p>Result:</p> <p>true</p>
<b>21.</b>	<p>Write a Java program to compute the sum of the first 100 prime numbers.</p> <p>Sample Output:</p> <p>Sum of the first 100 prime numbers: 24133</p>