

Instructions:

1. Click on File -> Make a copy

Include your IPO Chart with your code in Eclipse IDE: We will discuss and demonstrate this in the computer lab.

IPO CHART

Program name:	Monthly Car Payment (CarPayment)	
INPUT	PROCESS	OUTPUT
Hint: What will the user input?	Hint: What is the program going to do with the input information?	Hint: What will the screen display after user input?
<p>The user enters Principal owing (<i>double</i>), annual interest rate (<i>double</i>), and number of monthly payments (<i>int</i>)</p> <p>Eg. Enter the principal owing: 90000 Enter the annual interest rate as a percentage (e.g., 6.99 for 6.99%): 4.99 Enter the number of monthly payments: 48</p>	<p>The program reads the principal (<i>double</i>, e.g., 90000), annualRate (<i>double</i>, e.g., 4.99), and months (<i>integer</i>, e.g., 48) using a Scanner. It calculates the monthlyInterestRate (<i>double</i>) as $\text{annualRate} / 100.0 / 12.0$ (e.g., 0.00415833). It computes the numerator (<i>double</i>) as $\text{principal} * \text{monthlyInterestRate}$ (e.g., 374.25) and the denominator (<i>double</i>) as $1 - \text{Math.pow}(1 + \text{monthlyInterestRate}, -\text{months})$ (e.g., 0.1806). Finally, it calculates monthlyPayment (<i>double</i>) as $\text{numerator} / \text{denominator}$, resulting in approximately 2072.23.</p>	<p>The program outputs the monthly payment and the numbers the user input before.</p> <p>Eg. -----(<i>String</i>) Principal: 90000 (<i>int</i>) Interest Rate: 4.99 (<i>double</i>) Number of monthly payments: 48 (<i>int</i>) The monthly payment is: \$2072.23 (<i>double</i>) -----(<i>String</i>)</p>