

- The number of gallons of paint required
- The hours of labor required
- The cost of the paint
- The labor charges
- The total cost of the paint job

Then it should display the data on the screen.

5. Falling Distance

When an object is falling because of gravity, the following formula can be used to determine the distance the object falls in a specific time period:

$$d = \frac{1}{2}gt^2$$

The variables in the formula are as follows: d is the distance in meters, g is 9.8, and t is the amount of time, in seconds, that the object has been falling.

Write a method named `fallingDistance` that accepts an object's falling time (in seconds) as an argument. The method should return the distance, in meters, that the object has fallen during that time interval. Demonstrate the method by calling it in a loop that passes the values 1 through 10 as arguments, and displays the return value.

6. Celsius Temperature Table

The formula for converting a temperature from Fahrenheit to Celsius is

$$C = \frac{5}{9}(F - 32)$$

where F is the Fahrenheit temperature and C is the Celsius temperature. Write a method named `celsius` that accepts a Fahrenheit temperature as an argument. The method should return the temperature, converted to Celsius. Demonstrate the method by calling it in a loop that displays a table of the Fahrenheit temperatures 0 through 20 and their Celsius equivalents.

7. Test Average and Grade

Write a program that asks the user to enter five test scores. The program should display a letter grade for each score and the average test score. Write the following methods in the program:

- `calcAverage`—This method should accept five test scores as arguments and return the average of the scores.
- `determineGrade`—This method should accept a test score as an argument and return a letter grade for the score, based on the following grading scale:

Score	Letter Grade
90–100	A
80–89	B
70–79	C
60–69	D
Below 60	F