

## Practice S02P01: Speed of Sound

[http://www.comp.nus.edu.sg/~cs1010/4\\_misc/practice.html](http://www.comp.nus.edu.sg/~cs1010/4_misc/practice.html)

**Reference:** Unit 5

**Week of release:** Week 4

**Objectives:** Writing function, using math function

### Task statement:

Write a program **speedOfSound.c** that calculates the speed of sound  $s$  in air of a given temperature  $T$  (in degree Fahrenheit). Formula to compute the speed  $s$  in feet/sec:

$$s = 1086 \sqrt{\frac{5T + 297}{247}}$$

All values are of type float.

Your program should contain a function **speed\_of\_sound()** to compute and return the speed. You are to decide on its parameter(s).

### Sample run:

Temperature in degree Fahrenheit: **95.8**

Speed of sound in air of 95.80 degree = 1924.92 ft/sec